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THE MAKING OF GOD OF WAR

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THE RETROBATES

WHAT'S THE FIRST GAME YOU'LL PLAY ON THE A500 MINI?

DARRAN JONES

I'm going to introduce my 16-year-old daughter to the joys of Team17's *Alien Breed*.
Expertise: Juggling a gorgeous wife, two beautiful girls and an award-winning magazine, all under one roof!
Currently playing: *Tom Clancy's Ghost Recon: Shadow Wars*
Favourite game of all time: *Strider*

TIM EMPEY

Super Cars II – I loved playing this, but one track always bugged out on the copy I had. Hopefully it's fixed now.
Expertise: Finishing Game Pass games before they leave the service
Currently playing: *Elden Ring*
Favourite game of all time: *God Hand*

NICK THORPE

No need to imagine with this one! The first game I loaded up when we got sent the system was *Pinball Dreams*.
Expertise: Owning five Master Systems and a Mark III
Currently playing: *Picross S: Mega Drive & Master System Edition*
Favourite game of all time: *Sonic The Hedgehog*

ANDY SALTER

Speedball 2: Brutal Deluxe, one of my favourite games of the Nineties, wanted to get it for the Mega Drive but I remember it being delayed for some reason.
Expertise: Modding games, no 'vanilla' versions for me, thanks!
Currently playing: *M&B2: Bannerlord…* Modded of course
Favourite game of all time: *Rome: Total War*

PAUL ROSE

The Sentinel. Only ever had it on the Speccy, which was pretty janky, but the concept always appealed. And creeped me out a bit.
Expertise: Winging it
Currently playing: *Horizon Forbidden West*
Favourite game of all time: *Half-Life 2*

PAUL DRURY

After a quick blast of *Pinball Dreams* for old times sake, I'd go for *Simon The Sorcerer* - a game I've never played and a genre I miss a lot.
Expertise: Lost LaserDisc games
Currently playing: *Dying Light 2 Stay Human*
Favourite game of all time: *Sheep In Space*

ANDREW FISHER

The Chaos Engine - it has to be The Bitmap Brothers first, and this will be great for a quick session to test things out.
Expertise: Forty years of gaming, from Commodore 64 to Switch
Currently playing: *Tiny Dungeons*
Favourite game of all time: *Paradroid*

HARETH AL BUSTANI

Simon The Sorcerer! I've only ever played it on PC, and I would love to finally play it in its original glory.
Expertise: Juggling obscure games, words and guitar and seeing where it all lands
Currently playing: *Psychonauts 2*
Favourite game of all time: *The Secret Of Monkey Island*

RORY MILNE

The A500 Mini has a great line-up, but *Paradroid 90* is the system's standout title for my money. It may not scroll horizontally like the C64 original, but it looks nicer and has pirates!
Expertise: The game that I'm writing about at the time of writing
Currently playing: *Ecco The Dolphin*
Favourite game of all time: *Tempest*

The Amiga is one of the most popular home computers around with a library of incredible games. With that in mind, any company that is prepared to shrink it into a console-like experience certainly has its work cut out. Fortunately, Retro Games Ltd is more than up to the task, having already delivered systems like The C64 Mini and The C64. We've been lucky enough to talk to Chris Smith and Darren Melbourne in our huge ten-page feature on the system and they explain the difficulties and challenges that come from making an accurate, miniaturised version of the Amiga.

We'll be reviewing the system itself next month, but our exclusive hands-on feature should be more than enough to get you excited about this new accessible way to experience the popular 16-bit computer.

Speaking of hands-on, we've also managed to put Taito's Egret II Mini through its paces and quizzed numerous developers who worked on Sega's *After Burner* series, whether it was converting the original game or creating sequels like *After Burner: Black Falcon*. Other highlights this month include the evolution of *Project Gotham Racing*, the tumultuous development of *God Of War* and how the *CJ The Elephant* series was salvaged from the unused code of a cancelled arcade conversion.

Right, that's enough from me. I'm off to play *Stunt Car Racer*.

Stay safe and enjoy the magazine

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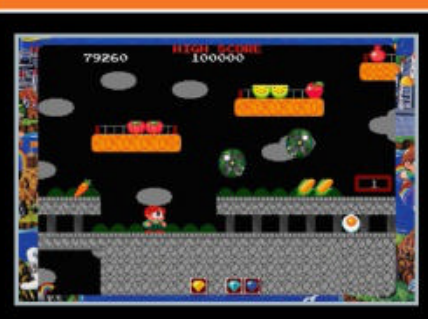

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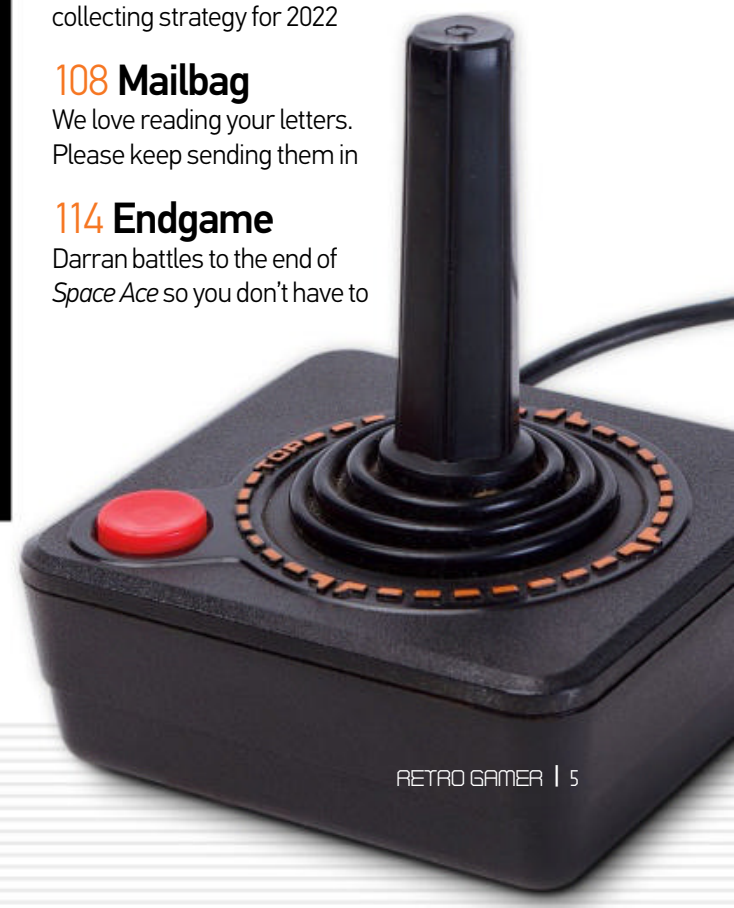

retro radar

GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD

> "Before you ask: it's no longer possible to manufacture physical Wii U and 3DS games"
>
> **JOSH FAIRHURST, LIMITED RUN GAMES**

» The Wii U's life was so short that it has already been discontinued for longer than it was ever in production.

CONTINUE/QUIT

Nintendo recycles past hits on Switch while terminating older stores

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It's June 2005 so Nick is travelling back to a time when you could play *God Of War* and *Kirby: Canvas Curse*

It has been a mixed month for fans of classic gaming and Nintendo. The Japanese giant used a Nintendo Direct video presentation to announce and showcase plenty of Switch projects with their roots in gaming history. Days later, it announced the schedule for the closure of the 3DS and Wii U eShop stores, and did so in a way that ruffled the feathers of players.

Let's start off with the positives from the Nintendo Direct, where Square Enix stole the show. *Live A Live*, a cult favourite SNES RPG, is being remade using the HD-2D graphical style seen in games such as *Octopath Traveler*. The game is famed for offering a variety of scenarios with different gameplay features, which can be tackled in any order. This will be the first official English release of the game, and it is due for release on 22 July. Tactical RPG *Front Mission 1st* is also being remade, this time by Forever Entertainment, the Polish studio behind the *Panzer Dragoon* remake. This mech battler originated on the SNES and despite appearing on various platforms since, has never appeared in Europe before. The new version will feature brand-new graphics but retains the isometric battle viewpoint.

Square Enix also announced *Chrono Cross: The Radical Dreamers Edition*, a remaster of the PlayStation RPG due out on 7 April, as well as *Kingdom Hearts Integrum Masterpiece*, a cloud-based collection of the popular RPGs that see *Final Fantasy* crossing over with the Disney universe.

Nintendo itself announced two sequels to long-dormant series. Nintendo Switch Sports is the successor to the 2014 release *Wii Sports Club* and will release on 29 April, while *Mario Strikers: Battle League Football* is due on 10 June and will be the first game in its series in 15 years. *Mario Kart 8 Deluxe* is to get a

» [Switch] The last *Mario Strikers* game came out 15 years ago on the Wii, so we didn't expect a sequel.

» [Switch] *Kirby And The Forgotten Land* looks like a fantastic way to celebrate the 30th anniversary of the series.

whopping selection of 48 past courses via new DLC packs, the first of which is out on 18 April. We also got a fresh look at *Advance Wars 1+2: Re-Boot Camp* ahead of its launch on 8 April. This remake of the excellent GBA turn-based strategy games features brand-new 3D visuals, voice acting and online multiplayer. Finally, *Earthbound* and *Earthbound Beginnings* are joining the Nintendo Switch Online service. We'd also be remiss if we failed to mention *Kirby And The Forgotten Land*, a delightful-looking 3D platformer due on 25 March.

Elsewhere, Namco delighted fans with *Klonoa: Phantasy Reverie Series*, a collection of the first and second games in the platforming series. The first game appears to be based on the Wii version, with some updates of the character designs to more closely match the PlayStation original. Other announced ports include *Assassin's Creed: The Ezio Collection* (out now), the Wii version of *Star Wars: The Force Awakens* (20 April) and *Portal: Companion Collection* (TBA).

Some of the goodwill from these announcements was lost when Nintendo announced its plans to close the 3DS and Wii U eShops. This will take place in a number of phases, the first of which is due for 23 May this year, when you will no longer be able to use a credit or debit card to add funds to your eShop account via 3DS or Wii U. On 29 August, you will no longer be able to add funds on 3DS or Wii U via Nintendo eShop Cards, which are commonly found in retail stores. Finally, in late March 2023, you will no longer be able to use your funds to buy new content on these systems. Nintendo has stated that you will be able to download your existing purchased games and DLC, receive software updates and play games online "after late March 2023, and for the foreseeable future".

» [Switch] Namco's *Klonoa* series never sold brilliantly, but those who bought in often ended up loving it.

» [Switch] We'll never say no to more *Advance Wars*, both of the GBA games were fantastic.

» [Switch] Forever Entertainment seems to be getting more high-profile remake jobs like *Front Mission* here.

The closure of these stores was inevitable – the 3DS is 11 years old now, and the Wii U will hit its tenth anniversary in November. However, as with any digital store closure, this does mean that hundreds of games will no longer be available to legally purchase. On Twitter, Josh Fairhurst of Limited Run Games stated, "Before you ask: it's no longer possible to manufacture physical Wii U and 3DS games," meaning that there is no chance of physical reprieve for existing digital games. Meanwhile, the Virtual Console service will finally end. Even fans who are OK with renting a library of games rather than buying specific favourites are upset, since systems such as the Game Boy Advance, DS and PC Engine still aren't represented on Nintendo Switch Online.

Sensing a potential backlash, Nintendo's FAQ on the closures initially addressed the question, "Will you make classic games available to own some other way? If not, then why? Doesn't Nintendo have an obligation to preserve its classic games by continually making them available for purchase?" The response highlighted that over 130 classic games are available via Nintendo Switch Online membership plans, with Nintendo claiming, "We think this is an effective way to make classic content easily available to a broad range of players," and confirming that it has "no plans to offer classic content in other ways". This statement has since been deleted, but that hasn't stopped it being circulated by disgruntled fans who feel that Nintendo does have that obligation. The company is unlikely to backtrack on this decision, given that it decommissioned the Wii's online services as planned, but we'll keep an eye out for any change of policy.

» The 3DS family has sold over 75 million units since 2011, and was only discontinued in late 2020.

DREAM ON

Wave Game Studios has announced a number of Dreamcast releases for the coming months. *Flea!* by Lowtek Games is a tough platform game that has previously appeared on the NES, and is out now for £24.99. Retro Sumus' 3D rail shooter *Xenocider* is due out on 2 April for £29.99, but cannot be shipped to the USA. The biggest news is that *Postal*, the isometric PC shooter from 1997, is receiving a brand-new Dreamcast port, licensed by original developer Running With Scissors. This is scheduled for release on 2 June, in a £29.99 standard edition and £39.99 limited edition.

EVERCADE EXPANDS

With *Renovation Collection 1* and *Gremlin Collection 1* just arriving this month, Blaze has announced its next pair of Evercade releases. *Intellivision Collection 2* features a dozen games originating from the classic 1979 console, including the popular action RPG *Tower Of Doom*, *Cloudy Mountain*, *Stadium Mud Buggies*, *Super Pro Decathlon* and *Mountain Madness: Super Pro Skiing*. *Morphcat Games Collection 1* includes the modern NES games *Böbl*, *Spacegulls* and the excellent four-player platformer *Micro Mages*. Each cartridge is priced £17.99 and will be available to preorder from 31 March, with release currently set for 31 May.

Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. Join him as he hosts a phone-in show and plays games at www.twitch.tv/iainlee and also check out www.patreon.com/iainandKatherine

It's all too much

There's too much stuff. Everything you could possibly want is a few taps on a keyboard away. Films, books, that T-Shirt you had when you were six – it's all out there, most of it for free.

I hate starting sentences with 'when I was a kid', but… when I was a kid it was so much harder to get stuff. I was really into The Monkees and to even join a fan club took about three months. They only had fan clubs in the US so I had to find out where they were (and come to think of it, I had no idea how I did this in 1986), write to them to ask about joining, wait for their reply five weeks later and then persuade my mum to physically go to the bank and pay for a cheque to be written out in dollars. Eventually you got your crappy photostatted magazine every two months. What all of this meant was we were not spoiled for choice. You had what you had, and you had to stick with it. One outcome of this in the Eighties was if you got a rubbish game, tough. You couldn't just go back to Boots and buy another. Well, you probably could a couple of times, but they would start to get a bit suss. So, we would often play games for hours on end that deserved only a few minutes of attention.

Here's a few. *Give My Regards To Broad Street*. I love McCartney and I also love the film this game is based on, even though it's regarded as one of the worst follies of all time. I remember very little about the game, just that you drove around town collecting stuff while a migraine-inducing version of *No More Lonely Nights* played on a loop. Odd to think that gamers would be interested in this tosh.

Speech! on the BBC. Now this was an odd one. It was groundbreaking and absolutely amazing, but it wasn't a game. I saw this on *Saturday Superstore* being demonstrated by Fred Harris and I persuaded my parents to buy it for me that day. £9.95 on a tape that was ultimately useless, certainly for a 14-year-old gamer. Once I'd loaded it up and got it to say the F word a few times, the novelty wore off and I never took it out of the case again.

The last one was *Bored Of The Rings*. This was a text adventure based on *The Lord Of The Rings* but with an oh-so hilarious sideways glance at the world. Man it was tedious and unfathomable. It may have been easier if I'd read *LOTR* but I wasn't about to subject myself to that mind-numbing task just to advance in a dull game. I hated it but I kept going back to it because I only have a limited number of games.

My kids now have everything they could have ever wanted and more. After writing this, it doesn't seem fair. I think I'm going to go around the house with a black bag today and chuck it all apart from a cassette of Speech! and a couple of issues of *The Beano*. That'll learn 'em.

Do you agree with Iain's thoughts? Contact us at:

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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

An icon for all ages

I don't think I've ever mentioned this before, but I'm slightly obsessed with Pac-Man. Not in a stalker-y sort of way, you understand. I'm not lurking in the bushes outside his Pac-Land mansion, binoculars in hand, or posting my own hair anonymously through his letterbox.

It's more that I think he's the perfect videogame character. Whereas humans grew to invent air fryers and *Wordle* – arguably the zenith of the evolutionary scale – our ancestors were all chattering monkey idiots who were only good for climbing trees and sitting around on rocks. However, the evolutionary trajectory of games characters saw them evolve into forms undeniably more complex, but far less perfect for it.

Indeed, I'd argue that there has never been a better videogame character than Pac-Man. He's a mouth, because all he has to do is eat. Form, meet function. When Toru Iwatani created that first *Pac-Man* game there was no need for limbs, or backstory, or even a hat. Consequently, I will argue to my grave that there has never been a more iconic videogame character design.

We all know the possibly apocryphal story about how Pac-Man's design was inspired by a pizza with a slice missing, but I'm more inclined to believe the lesser-known story that the design was based upon the Japanese character 'kuchi', meaning 'mouth' or 'orifice' (stop sniggering at the back), because it makes more sense. Genius.

Of course, *Pac-Man* was – rightly – a huge hit, and Namco almost immediately began squeezing every last drop of potential out of the character. Alas, the second Namco started adding more detail – beginning with Ms Pac-Man's bow – the less interested I was. The more complex the games themselves became – with forays into side-scrolling platforming, isometric mazes, quiz games – the more complex the character design needed to be. As a result, Pac-Man evolved into something less iconic – and vastly less interesting – than he'd been originally.

Which, of course, doesn't take away from the achievement of that original design, because has there been another character who has transcended the games industry to quite the same level of global awareness? I'm fairly certain that none of my very grown-up children have ever played a *Pac-Man* game, yet all of them could name him. My eldest daughter was born ten years after the first *Pac-Man* game, and there never was a *Pac-Man* game particularly worth playing in the years subsequently. Yet, still could she recognise him.

Admittedly, they'd all probably be able to recognise Sonic and Mario, but they'd struggle with Lara Croft or Master Chief. My mum, I'd wager, could only manage Pac-Man. This, for me, is the mark of a timeless character design – one that was born decades ago, before polygons, before bump mapping, and 4K, and HDR, and all those other boring things that actually don't make a difference to real artistry.

Heck, as I write this I've just become a grandad, and while my one-week-old grandson can't yet speak, I'm fairly certain that if I showed him a picture of a yellow circle with a triangular slice taken out I would be able to see a flicker of recognition cross his face.

> "I'd argue that there has never been a better videogame character than Pac-Man"

Do you agree with Paul's thoughts? Contact us at:

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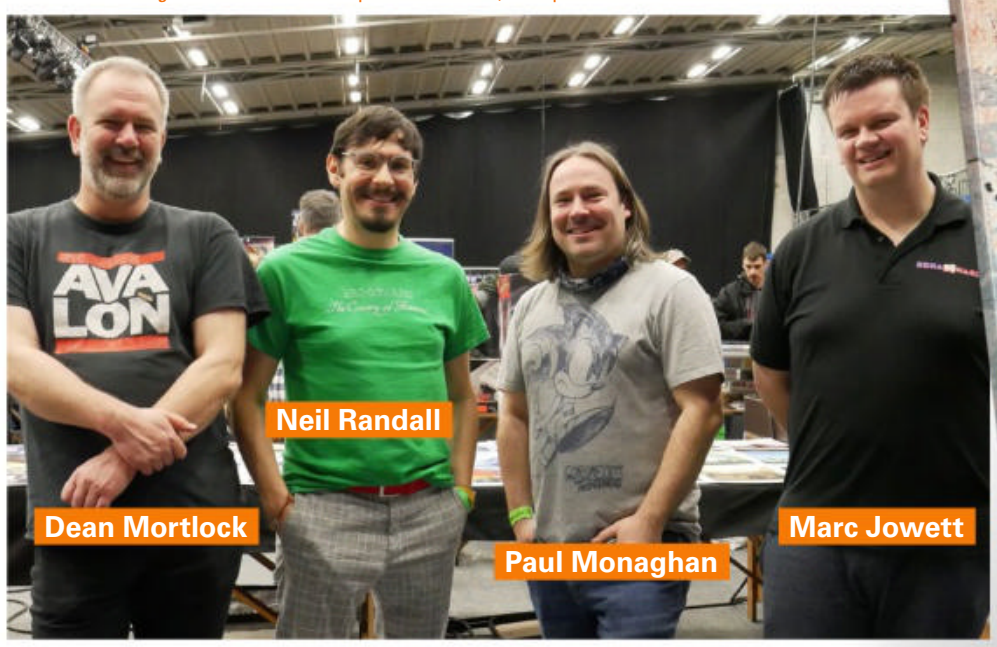

Sega Powered

The team behind a new independent Sega magazine tell us all about how the project has come together

New retro gaming magazines seem to be popping up all over the place these days, and *Sega Powered* (segapowered.com) is the latest to embrace the power of the printed page. It's got quite the team behind it too – editor Dean Mortlock and deputy editor Neil Randall worked on Sega magazines when Sega still made consoles, and they're joined by Paul Monaghan and Marc Jowett as staff writers. We spoke to them to see what's behind this new launch.

How did you guys arrive at the idea of putting together a new Sega magazine?

Neil: Dean said, "What do you think about putting together a games mag?" I said, "Dreamcast. People love Dreamcast." Someone said SNES. Someone else said indie. Dean then said, "How about a Sega retro mag?" I said, "Do it."

Dean: It was a no-brainer for me. I spent six lovely years on *Sega Power* magazine from 1992-1998, and although I was a gamer before and obviously have been since, my heart always really belonged to Sega. And when you consider that Neil was on *DC-UK*, Paul is a hardcore Sega fan and Marc runs SegaMags, it couldn't really be anything else.

Paul: In November 2019 I met up with Dean after he had previously been a guest for Maximum Power Up podcast. We discussed the possibility of him returning to the field of games magazines down the line. With my love of all things retro and desire to get into games journalism, I jumped at the chance to be part of the team.

Marc: I am well-known for my near-complete collection of UK Sega magazines (over 630!) which is how I came to Dean's attention. It's an honour to be part of the team.

What should readers expect to see in *Sega Powered*?

Neil: Retrospectives on classic games – do they still stand up? – reviews of new games Sega publishes, features about all things Sega, a surprisingly packed news section, plus coverage of the indie scene. We've aimed to capture our individual voices, bolstered with expert opinions from old and new contributors, and all wrapped up in top-shelf design. Of course, nothing's beyond our combined flippancy – it's got to be a fun read, after all – but everyone shares a love of Sega, and we're confident it shines through.

Dean: Yeah, what Neil said. My plan for *Sega Powered* was to make a magazine that felt familiar to anyone who loved the old mags, but with a more contemporary design. I wanted it to feel like a modern update to *Sega Power*, covering not only

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SONIC TURNS 30
Celebrating SEGA's rebel
MASTER SYSTEM • GAME GEAR • MEGA DRIVE • MEGA CD • 32X • SATURN • DREAMCAST

» Could you really launch a Sega magazine without Sonic on the cover? You could, but you'd be mad.

> "Everyone shares a love of Sega, and we're confident it shines through"
> **NEIL RANDALL**

» Games journalists past and present talk Sonic. Les Ellis still thinks the hedgehog isn't all that.

the classic stuff, but all the really exciting things happening in the indie community, too.

What do you think it is about Sega that keeps its fans so attached to the company?

Dean: Good question. I suspect it has something to do with the company's arcade heritage, in that they know exactly how to make a game that is both impactful and incredibly playable. As time rolled on, we got to see more and more games of depth, but for pure arcade thrills, there's little in my mind to touch the likes of *Sega Rally* and *Virtua Cop*. Time has been incredibly kind to these games too, and they're just as playable now as they've ever been.

Neil: I'm sure gamers will each have their own perspectives, but Sega was front and centre in my formative gaming experience, from poring over Master System games in Tesco, where I worked, to seeing *Sonic* for the first time. That blue logo and that famous jingle became the essence of videogames for me, and have been inextricably linked to some of my fondest memories, not to mention the catalyst that turned me into a serious gamer. Irrespective of its rocky history, Sega will forever be my greatest videogame love.

Paul: Sega has a history that so many of us experienced growing up. Visiting the likes of Arcade Club shows how much people love playing the iconic racers such as *Sega Rally* and *Out Run*.

Marc: For me it's the franchises, probably the unique ones more than anything. *Shenmue*, *NiGHTS*, *Jet Set Radio*… those sorts of games.

There are plenty of retro gaming magazines out now, but Dean and Neil's involvement as veterans of Sega magazines past makes *Sega Powered* stand out. What tempted you to come back?

Dean: I've always had the idea of launching a games magazine in the back of my mind, but just wasn't sure of the best way to go about it. It was really when Paul started working for Amiga Addict that the idea resurfaced. It was also because of the team, too. I really wouldn't have launched *Sega Powered* without Neil, Paul and Marc also working on it. I had a hunch that the four of us would complement each other well, and luckily I was right.

Neil: Despite spending most of my potted writing history covering new games for all kinds of mags, I've always had the greatest passion for retro. If I'm honest, career high points are crafting *Edge*'s Mega Drive feature, and revisiting *Gley Lancer* for **Retro Gamer**. Unsurprisingly, Dean's offer to bleat about old Sega games was a no-brainer.

Marc and Paul are both obviously big fans of magazines past – did you have any Sega favourites other than *Sega Saturn Power* and *DC-UK*?

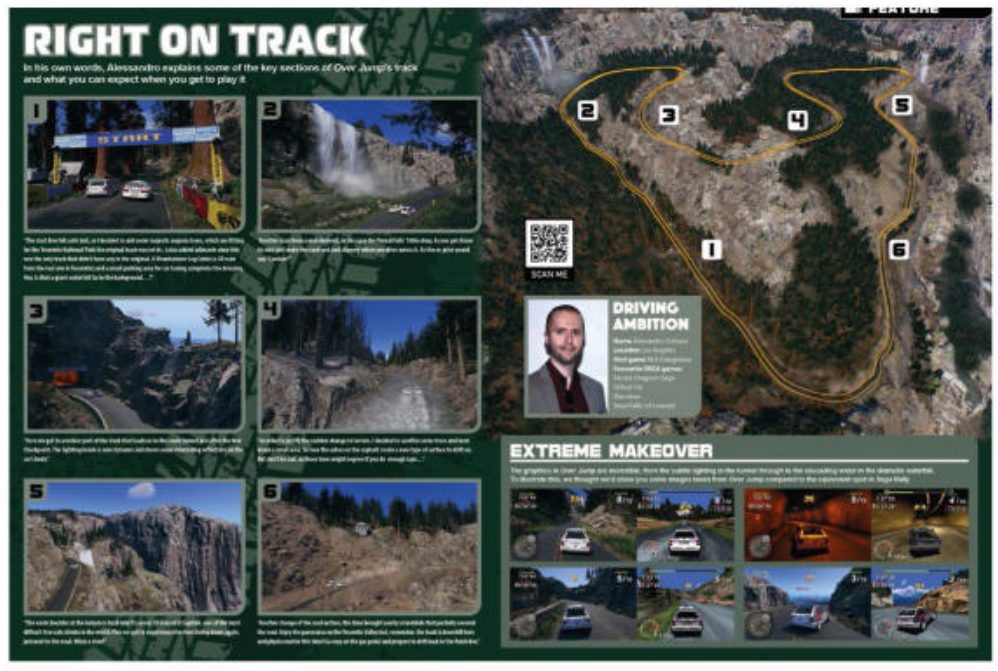
Marc: *MEGA* was mostly my Mega Drive magazine of choice in the Nineties but I also have fond memories of the short-lived *Mega Action* as well. My dad only bought me that because it was 99p at the very beginning!

Paul: Despite buying so many of them, *Mean Machines Sega* always stood out for me. Those early issues following the split were such a special time as a gamer. The Mega Drive and SNES were fierce rivals and as a reader both *MMS* and *Nintendo Magazine System* showcased hit after hit! The writing talent the magazine had still amazes me after all these years.

The design of the mag stands out too, who's behind that?

Dean: We had a lot of help from Terry Stokes (legendary art editor of *Edge* magazine) at the start, who was instrumental in putting together the initial look of *Sega Powered* together – from the logo right down to the page templates. The art editor of issue 1 onwards though has been Kate Munday. Although she's not a gamer herself, she has a fantastic eye for what makes a feature stand out.

» Issue 1 features an interview about *Over Jump*, a racer inspired by *Sega Rally*.



» We're never going to turn down a chance to reminisce about excellent shoot-'em-ups.

» More Dreamcast indie fun here, with a feature on the bizarrely titled *Yeah Yeah Beebiss II*.

What's your personal favourite Sega system?

Marc: Saturn, definitely. I remember most of my mates at school owning PlayStations but I had a loyalty to Sega no matter what.

Paul: Will always be the Mega Drive for me. It had such a mixture of genres, and there were many must-play games the SNES didn't have.

Neil: Mega Drive. That black box holds a world of magic.

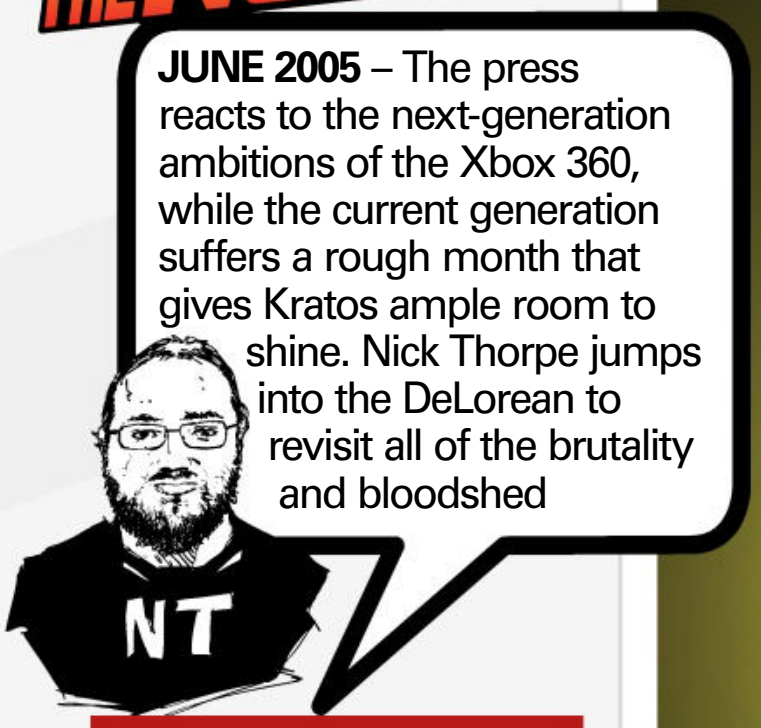
Dean: Ah, tough one. Pushed into a corner, I'd probably say Saturn. Some of Sega's arcade conversions were stunning, and there are some incredible Japanese-only games still available for curious collectors.

» Here's that feature on rarities – we quite like the look of the Master System kiosk.

» Issue 2's cover features Sega rarities including prototype Saturn and Nomad consoles.

SEGA
POWERED
ISSUE 02 / MAR2022
RARE CATCHES
The definitive collectors' guide to SEGA hardware
MASTER SYSTEM • GAME GEAR • MEGA DRIVE • MEGA CD • 32X • SATURN • DREAMCAST

BACK TO THE NOUGHTIES



JUNE 2005 – The press reacts to the next-generation ambitions of the Xbox 360, while the current generation suffers a rough month that gives Kratos ample room to shine. Nick Thorpe jumps into the DeLorean to revisit all of the brutality and bloodshed

Robbie Bach is the man with the plan for the Xbox 360 to take over the market. But is it the right one?

NEWS JUNE 2005

Exeter resident Claire Miles defied medical odds on 8 June, when her babies Maisie and Noah were born by Caesarean section. The new mother had previously been told that she was unlikely to have children, due to having two half-sized wombs – a rare condition affecting one in a million women.

On 11 June, boxer Mike Tyson quit a fight against Kevin McBridge before the beginning of the seventh round. The former two-time world heavyweight champion announced his retirement from the sport shortly afterwards, claiming, "I don't have it in my heart anymore." Over the course of his 20-year career, Tyson recorded fifty wins and six losses. He brought great attention to the sport, but attracted plenty of negative publicity for his personal problems.

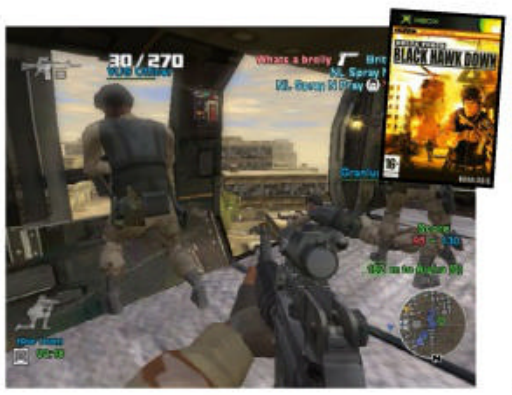
The Supreme Court Of The United States issued a decision in the MGM Studios, Inc vs Grokster, Ltd case on 27 June. The ruling held that operators of peer-to-peer file sharing networks were liable for copyright infringement performed by users, should the operators of those services be deemed to have induced that usage. This overturned two rulings in lower courts, which held that Grokster's software also had substantial non-infringing uses and was protected under the Betamax principle. As a result, Grokster closed before the end of 2005 and similar services such as Kazaa and Morpheus followed suit in 2006 and 2007.

THE LATEST NEWS FROM JUNE 2005

Following the reveal of the Xbox 360 in May, the press finally had a chance to speak up on Microsoft's new machine. The mood was pretty positive in *Edge*, which considered that "with a head start, an aggressive timetable, a mainstream-friendly vision and a bedrock of gaming credibility, the 360 is unquestionably going to dent Sony's dominance". In *games™*, there was a little less enthusiasm. "With people still content with the current generation Microsoft is really having to pull out all the stops in convincing gamers that they need to upgrade or be left behind," the magazine stated, though it did report that analysts saw the early launch as a wise choice. For its part, Microsoft was making some pretty bullish statements. In the *Official Xbox Magazine*, Robbie Bach said, "We intend to win this generation and we believe we have the product and partners to do this," continuing, "The best outcome is that both Microsoft and Sony each have 50% market share," a statement that seemingly excluded Nintendo as a serious competitor in the market.

The most exciting game of the month was easily Sony's *God Of War*, a hack-and-slash adventure with a Greek mythology theme. The *Official PlayStation 2 Magazine* focused on the game's unrelenting violence, describing protagonist Kratos as a man who "will twist your arm behind your back just so he can shove your own sword up your arse". Fortunately the carnage didn't get dull, as "there's always a new combo to perfect or tactic to discover", but the game was knocked down to 9/10 for the Hades section as it's "one of the most frustrating points in a game ever". *Play* compared the game to *Devil May Cry 3*, opining that "the actual combat isn't quite as tight or stylish, but it's far more forgiving", and added praise for the "gripping boss battles". This was worth a score of 90%, and *games™* also awarded the game 9/10.

Elsewhere on the PS2, Capcom's new action RPG franchise *Monster Hunter* made an inauspicious debut. The interface and controls were criticised by *games™*, as was the repetitive nature of the single-player game. However, the reviewer felt that "if you've got your PS2 up and running online the game opens up like you wouldn't believe", as "the number of strategies available



[Xbox] It's a multiplayer game of *Delta Force: Black Hawk Down* – apparently, the only mode worth bothering with.

[Xbox] Go on Crypto, zap the human. We've heard humanity is a bit rubbish anyway.

[PS2] Who would have guessed that this 7/10 game would become one of Capcom's biggest money spinners?

[PS2] *God Of War* would draw attention in any month, but this slow summer really helped it.

[PSP] The cold look of *Mercury* contrasts with the fiery rage it could inspire in even the most patient of players.

to a quartet of hunters is almost immeasurable". That was good for a 7/10 score, which was the same score awarded by the *Official PlayStation 2 Magazine*, which shared similar sentiments. First-person shooter *Area 51* earned mixed reviews – 9/10 from *Official PlayStation 2 Magazine*, 80% from *Play* and 5/10 from *games™* for the Xbox version. *Play* felt that, "Every aspect of *Area 51* is performed with quality, but with borrowed style that's familiar yet doesn't breed contempt," where *games™* thought it "massively derivative" and "painfully middle of the road".

Xbox owners looking for exciting new games this month had somewhat limited options. *XBM* had an exclusive review of *Destroy All Humans!*, which cast you as an alien tasked with harvesting human DNA. It earned 8/10, as, "The endlessly entertaining ways to kill and manipulate humans (and animals) make this a very hard game to put down." Other than that, the only noteworthy UK release was *Delta Force: Black Hawk Down*. Earning 7/10 from both *XBM* and *OXM*, the latter described it as both "an absolute stinker of a game" offline and "unashamedly brashest Live game out there". Anyone not interested in strategy games would have been out of luck on PC, as the only games to rise above 70% in *PC Gamer* were the real-time releases *Imperial Glory* (72%) and *Stronghold 2* (75%), and the turn-based titles *Gary Grigsby's World At War* (76%) and *Domination* (73%) .

Spare a thought for poor GameCube owners though, as this month was truly barren for them. *NGC* featured just two reviews, both of Japanese import games – agricultural RPG *Harvest Moon: Song Of Happiness* scored 85% and *Donkey Konga 3* earned 80%. The bongo bashing music game was also reviewed in *Cube*, where it earned 8.6/10. Game Boy Advance owners had better luck, with *Kingdom Hearts: Chain Of Memories* earning 4/5 in *NGC* and *Lego Star Wars* getting 8.4/10 in *Cube*. *Wario Ware: Twisted* got 5/5 in *NGC* and 8.3/10 in *Cube*, but only importers could enjoy the twists and turns of its microgames. On the DS, reviewers were impressed by the doodle-driven platforming of *Kirby: Canvas Curse* (7/10 *Edge*, 5/5 *NGC*, 8.4/10 *Cube*) and charmed by the free form musical experience of *Electroplankton* (8/10 *Edge*, 4/5 *NGC*, 7.8/10 *Cube*).

Lastly, prospective PSP owners will have been excited by the reveal of the UK launch details. The hotly anticipated handheld would finally arrive on 1 September, as part of a £179.99 bundle including a 32MB Memory Stick Duo, carry case and headphones. As if to whet appetites further, *Edge* and *games™* each scored *Archer MacLean's Mercury* 8/10, with the latter calling the physics heavy puzzle game, "The *Lemmings* of the new millennium."

Next month, the next-generation war kicks off in earnest at E3.

CHARTS

JUNE 2005

PLAYSTATION 2

1 – FIFA Street (EA)
2 – Gran Turismo 4 (Sony)
3 – Midnight Club 3: Dub Edition (Rockstar)
4 – Splinter Cell: Chaos Theory (Ubisoft)
5 – Brothers In Arms: Road To Hill 30 (Ubisoft)

XBOX

1 – Jade Empire (Microsoft)
2 – Doom 3 (Activision)
3 – Midnight Club 3: Dub Edition (Rockstar)
4 – Lego Star Wars (Eidos)
5 – Splinter Cell: Chaos Theory (Ubisoft)

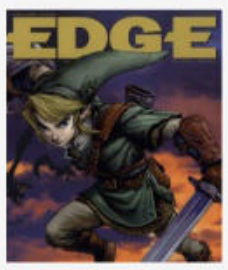
GAMECUBE

1 – Mario Power Tennis (Nintendo)
2 – FIFA Street (EA)
3 – Mario Kart: Double Dash!! (Nintendo)
4 – Metroid Prime 2: Echoes (Nintendo)
5 – Donkey Kong: Jungle Beat (Nintendo)

MUSIC

1 – Axel F (Crazy Frog)
2 – City Of Blinding Lights (U2)
3 – Lonely (Akon)
4 – Feel Good Inc (Gorillaz)
5 – 1 Thing (Amerie)

THIS MONTH IN...



Edge

With the 360 revealed and "stock drying up in stores, and exclusive content drying up on shelves", *Edge* laments the Xbox's short life. "We've still only seen a fraction of what the hard drive and the Live service can offer. As the PS2 starts showing its age, and the GameCube fails to ignite Nintendo's potential, the Xbox should be striding ahead."

Official PlayStation 2 Magazine

"This really is an unplayable shit-pile of honking mess," begins a 1/10 review of *Volleyball Challenge*. "You don't actually move your players at all, you just select different moves. That isn't a game, it's a goddamned glorified menu screen." So bad was this game that it "made us so angry we actually punched a desk".

Cube

"Backwards compatibility is the equivalent of shifting GameCube consoles, and is something that would definitely affect publishers' decisions," says *Cube*'s E3 preview. "Revolution will boast this very feature," it continues, noting "a far greater chance" of multiplatform releases hitting the GameCube. Lots of optimism there, chaps.

Sabre Wulf

LOOKS AREN'T EVERYTHING

» AMSTRAD CPC » 1985 » ULTIMATE PLAY THE GAME

Whenever I visited Paul Elkins' house after school, or stayed at my next door neighbour's while I waited for my mum to come home, I'd always ask to play one game – *Sabre Wulf*.

I bloody loved that game and I still hold a torch for it today. In fact, I loved it so much that when I had a chance to visit Rare many, many years ago, I spent an inordinate amount of time pitching my amazing idea for an updated four-player version of *Sabre Wulf* when the assembled throng of talented staff clearly wanted me to discuss *Jetpac Refuelled* with them instead (you can read about *Jetpac*'s creation in issue 39).

Sabre Wulf was released a little later on the Amstrad CPC and my anticipation for it was immense. I had saved a bunch of pocket money and eagerly purchased the game on our weekly trip to Poole. A few of my mates with Amstrads already had it and they were crowing to my Spectrum-owning friends about how much better *Sabre Wulf* was on the superior CPC.

I arrived home and quickly assumed control of the family TV (I sadly didn't own a colour monitor for my Amstrad). I loaded *Sabre Wulf* up and was presented with a rather nice loading screen. Granted it didn't offer quite the same sense of adventure that I felt whenever I watched the Spectrum's loading screen appear, but it's an interesting image all the same and falls in line with similar loading screens that would appear on later Ultimate titles like *Knight Lore* and *Alien 8*.

While I'd heard good things about Ultimate's Amstrad port (I'm assuming it was coded in-house) I still couldn't get over just how colourful and vibrant *Sabre Wulf* appeared on my computer. Sabreman himself looked rather wonderful with a blue pith helmet and matching boots, while the vast majority of critters you faced were just as colourful as the jungle they inhabited.

And yet, something felt a little *off* compared to the Spectrum version I had played so much at Paul's house. Sabreman just didn't feel quite as responsive to control and the flow of the game felt a little more sluggish compared to the zippy pace of the Spectrum original. I'd imagine this sounds like I was dissapointed with my new purchase. I wasn't, but it was one of the first games to make me realise that graphics certainly weren't everything and that how a game played was ultimately far more important.

HI
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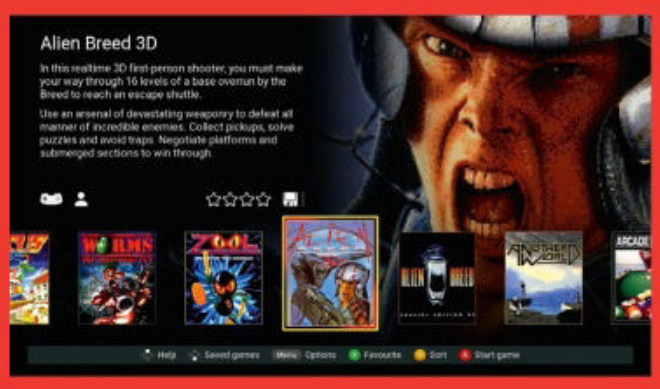
INSIDE THE A500 MINI

Commodore's 16-bit hit is back in town, and in a cute form factor that has the potential to turn a whole new generation on to the Amiga. We go hands on with the machine, and talk to Retro Games Ltd to find out how the whole project was put together

WORDS BY NICK THORPE

» [The A500 Mini] *Alien Breed* is Darren Melbourne's recommendation for Amiga newcomers to try first, due to its pick up and play nature.


Alien Breed 3D
In this realtime 3D first-person shooter, you must make your way through 16 levels of a base overrun by the Breed to reach an escape shuttle.
Use an arsenal of devastating weaponry to defeat all manner of incredible enemies. Collect pickups, solve puzzles and avoid traps. Negotiate platforms and submerged sections to win through.
WORMS
ZOOL
ALIEN BREED
ANOTHER WORLD
ARCADE
Help
Saved games
Options
Favourite
Sort
Start game

» [The A500 Mini] The game selection carousel is easy to browse and provides plenty of information without much need to dig further.

One of the unfortunate realities of retro gaming is that some platforms are easier to get into than others. Anyone wanting to get into the Mega Drive would have no problem today, with plentiful options including original hardware, clone systems, compilations, digital releases and the Mega Drive Mini. By comparison, the Amiga can be pretty daunting. The original hardware is now quite expensive, and floppy disks are unreliable to say the least. The games aren't widely available on modern platforms, and as great a job as the community has done in emulating the machines, it's certainly not as simple a process as with other popular retro formats. It isn't the hardest platform to get into, but to this point anyone wanting a quick and convenient way to enjoy the games has been short of options.

Enter The A500 Mini, a mini console which aims to simplify the experience of Amiga gaming considerably. The device has been created by Retro Games Ltd, which has previously delivered The C64 Mini and The C64, and is due for release on 25 March for £119.99. It comes with 25 built-in games, and excitingly it isn't limited exclusively to games using the original chipset, as it can also run games designed for AGA Amiga computers such as the Amiga 1200. Accompanying the main unit you'll find a classic-style mouse and a new game pad, each of which can also be purchased separately for £19.95. The keyboard on the device is just cosmetic, as was the case with The C64 Mini, but a virtual keyboard can be pulled up for games that require it. TV output is 720p over HDMI with 50Hz and 60Hz options. The device is very specifically targeted towards gaming, so you shouldn't expect to be dropping into Workbench or anything like that.

Given that Retro Games Ltd ended up producing The C64 in response to user demand for a full-size machine that could be used as a computer, you might be curious as to why this approach has been taken. However, The C64 Mini provided a learning experience for the team. "We understand our users better," says Chris Smith, chief technology officer at Retro Games Ltd. "Something that we have learned from The C64, we knew about going in, is there are different types of users. There are power users, the diehard users – really invested passionate users. And then there's the casual user, the other end of the scale and in fact, it's more the latter that makes up our customer base than the former," he explains. "A lot of the complexity of these old machines puts people off. They might have one up in the loft or they might get one on eBay. But then it's like, 'I've got to find a monitor it works with now,' or some CGA to HDMI converter, then, 'I've got to get the games, but my floppy drive's now rubbish so I've got to get the head realigned.'

"We were far more ambitious at the onset as for what we were going to do, and then we had this concept of it needing to be some sort of little console thing, that you just plug in and it plays the game. But we didn't really

DARREN MELBOURNE
Licensing director, Retro Games Ltd

CHRIS SMITH
Chief technology officer, Retro Games Ltd

YOUR PERFECT LOOK

THE VISUAL OPTIONS OF THE A500 MINI, AT A GLANCE

FIXED SIZE

No zoom is applied here, which usually gives a pixel accurate look but a smaller on-screen image.

MODERATE ZOOM

This option applies a good level of zoom, without adding too much in the way of scaling artefacts.

SCREEN FIT

You'll get maximum screen usage, but may experience more pixel shimmering during scrolling.

IMAGE SMOOTHING

Softens pixel edges at all levels of zoom. Never our favourite choice, but a nice option to have.

CRT EFFECT

This mimics an old monitor by adding scanlines and smoothing, regardless of whether smoothing is on.

MENU

Here's the display menu. Look! We've shown off all of the options. We're good to you lot really.

» [The A500 Mini] *Alien Breed 3D* is one of several AGA-based Amiga games that have been included with the system.

understand what that was because there wasn't anything. And then Nintendo brought out the NES Mini. And we were like, 'Oh, that's it. That's what it is.' We already had hardware designed and we were designing software, but we just weren't quite sure what it needed to be. And that basically just honed our direction, really. And so we're just leveraging on what we've already built now with the Amiga."

Booting up the system for the first time, the commitment to simplicity shines through. The game selection menu presents you with an attractive line-up of box art to scroll through with the d-pad until you find a game you like. Once you do, you can start it immediately, press up to display a quick overview of the control scheme or press down to access your saved games. When you're in a game, you can suspend the action at any point by pressing the Home button on the controller, allowing you to change settings or save your game. Once you're done, pressing Home again brings you right back into the action. It's as good of a user interface as we've ever seen on a mini console, but the streamlining of the Amiga experience doesn't end there. The games are all presented in such a way that there is no need to mess around with swapping virtual floppy disks, and loading times are minimised.

» [The A500 Mini] If you're looking for an excuse to pick up a second controller for the system, *The Chaos Engine* is as good as any.

» [The A500 Mini] Team17's top-down racer *ATR* is a tricky beast to begin with, but you'll get the hang of the handling soon enough.

» This early revision features a number of everyday items so that you can get an idea of how big The A500 Mini is. Its mouse seems comically huge next to it.

Of course, all of the user friendliness in the world counts for little without anything to play, and The A500 Mini comes with 25 games installed as standard.

Even a cursory glance at that roster is bound to excite the Amiga faithful, as plenty of iconic games are included. *Another World*, *Alien Breed*, *Stunt Car Racer* and *Zool* are all games that are closely associated with the platform, and provide plenty of variety on their own. *Worms: The Director's Cut*, *The Chaos Engine*, *Kick Off 2* and *Speedball 2* are equally well-known by fans of the platform, and will provide multiplayer fun for those looking for it. Meanwhile, games like *Simon The Sorcerer*, *The Sentinel* and *F-16 Combat Pilot* represent the kinds of experiences that set computers apart from consoles in their day. It's impossible to provide a truly comprehensive snapshot of a software library as vast and diverse as that possessed by the Amiga family, but this is certainly a commendable effort.

Interestingly, gathering the games was quite a tricky task. "You'd be amazed at how very few people actually do keep records, actually do keep clear chain of title," says Darren Melbourne, licensing director for Retro Games Ltd. "I'm not just talking small guys who might have written budget titles for Atlantis or Vulcan or someone like that. I'm talking arcade manufacturers, I'm talking huge, huge IP owners that have actually lost sight of a lot of the IPs they own." That makes a lot of sense. Take a quick look at the Amiga charts in the summer of 1992, and you can see how many companies no longer even exist – Ocean, Gremlin Graphics, MicroProse, Virgin Games, Psygnosis. Only two notable exceptions remain, Electronic Arts and Team17, and there are plenty of Team17 games on The A500 Mini. But even with the company still operating, there were challenges involved. "Even with Team17, you've got a lot of their titles developed in-house obviously, but you've also got quite a lot of content that was licensed-in," Darren explains. "If you're looking at the licensed-in content, if you don't have sign offs and it's not clear, then we just tended to avoid it.

> *"You'd be amazed at how very few people actually do keep records, actually do keep clear chain of title"*
> **DARREN MELBOURNE**

"I would say with the exception of Bitmap Brothers, all of them took some level of investigative work. You take something like *Stunt Car Racer*, which is one of my all time favourite games. Crammond back in the day was published by MicroProse, which was then bought by Atari. There's a group out in the US who claim ownership of *Stunt Car Racer* and *The Sentinel*, but they're not prepared to give any warranties or indemnities against it. And when I finally went back in this big circle to Geoff Crammond, he basically came back and said, 'Well, no, I own it all. All the rights reverted to me upon bankruptcy.' So I went through this whole securities trail, through the owners of Atari through the bankruptcy of MicroProse to this group out in California who claim they own it, to arrive back at Geoff's door in the first place. I was assured that the rights lay elsewhere, but no, Geoff retains the rights to both *Stunt Car Racer* and *The Sentinel*."

Some of you will note that 25 is a relatively low number of games by the standards of modern retro consoles, mind – only the SNES Classic Mini and the PlayStation Mini have come with

» [The A500 Mini] *Project-X* is just as ruthless as it ever was. Expect to die quickly, and expect to die often.

» [The A500 Mini] The great Amiga football debate will never be settled, but *Kick Off 2* is the game that reached The A500 Mini.

» [The A500 Mini] Titus The Fox is here to ensure that the platform genre is represented on The A500 Mini.

» [The A500 Mini] We tend to associate *Paradroid* more closely with the Commodore 64, but *Paradroid 90* is a very welcome inclusion.

fewer in recent times. This arguably reflects a disadvantage Retro Games Ltd has compared to many other companies in the retro console market, which have deep catalogues of classic games that they own outright and can include at little to no additional cost. That's true of the systems we mentioned above, as well as everything from the PC Engine Mini to the forthcoming Egret II Mini. Retro Games Ltd doesn't have a comparable stash of its own games to include on the device and has had to work to a budget, which has meant that some wish list titles didn't make the cut. "Being honest, there was all of the LucasArts titles that we would have absolutely loved, but I think they were just slightly above the budget we had available," admits Darren. "So yeah, I think that that was our biggest issue. It wasn't chain of ownership or providence, it was more financial that we were finding to be an issue."

However, the not-so-secret weapon of The A500 Mini is that it can play games that aren't pre-installed on the device with a minimum of fuss. It supports loading additional games via USB stick right out of the box, using the commonly used WHDLoad packages, and is a very simple process – see the boxout below for more on that. That opens the machine up to hundreds of games, though the system's packaging contains a disclaimer reminding owners these should be legally obtained. Indeed, Darren can see people selling software for The A500 Mini, but Retro Games Ltd won't be throwing its hat into that particular ring. "It'd be fun to set up some kind of store and offer it legally. But I think that's quite a big undertaking. I think that's something that we would encourage perhaps third-parties to do," he tells us, highlighting companies offering new software as ones that could take advantage of the opportunity. "With The C64, Protovision, Psytronik, RGCD have all made some pretty good business by offering original games for the full size and the Mini, and they are selling, which is fantastic news."

» [A500 Mini] We reckon Tim will be pleased to see this. Honestly, if he wasn't here, this would a *Dragon's Breath* screenshot.

» [The A500 Mini] *Cadaver* oozes the trademark style that every Bitmap Brothers game carried so effortlessly.

For older games, Darren takes a much more realistic approach to the idea of selling them on the new system.

"They're so readily available everywhere. I think even if we set a store up, people would be able to pretty quickly access the games for free pretty much anywhere," he tells us. "You know, as you look at WHDLoad, awesome application that it is and the work they've done in preservation over 25 years is outstanding. Although being brutally honest, we also have to understand that the original IP owners don't get money from that. So it does exist in that grey area. These things haven't been monetised for 25 years, so they tend to be overlooked slightly by the IP owner. But the problem with that, of course, is monetising them then becomes virtually impossible."

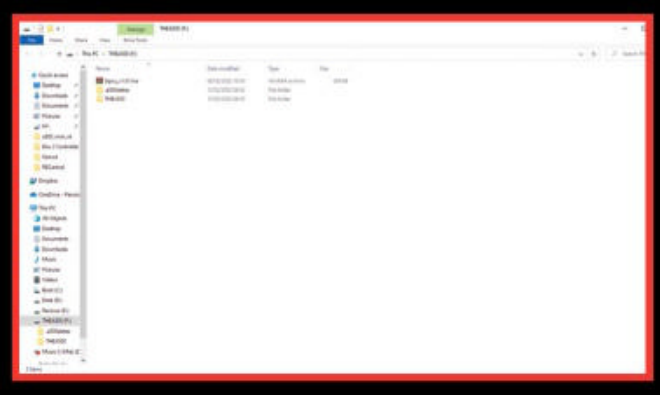
The hardware side of The A500 Mini has been equally considered, with the goal being a high level of authenticity. "We're not trying to make any design decisions. I mean, we reluctantly remodelled the back of the Amiga case, because it's got USB

EXPAND YOUR HORIZONS

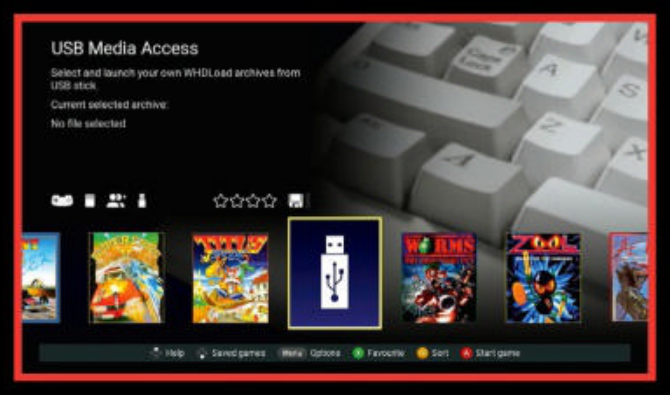
HOW TO USE WHDLOAD TO ADD NEW GAMES TO YOUR A500 MINI IN FIVE EASY STEPS

Media select
Your USB stick does not have THEA500 WHDLoad Package installed.
Find full instructions and the package download online.
https://retrogames.biz/products/thea500/support/whdload
Close

1 Insert a blank USB stick into your A500 Mini. Select it from the menu and you'll be directed to download the WHDLoad package on a computer.



2 Use a computer to add the WHDLoad files to your USB stick, as well as a suitable game package. We've chosen the homebrew platformer *Sqrxz*.



3 Now return your USB stick back to The A500 Mini, and once again you should select the USB media access icon from the main game carousel.

» [The A500 Mini] *Another World*'s cinematic platforming is still something to behold – no wonder it's still being ported to modern systems.

» [The A500 Mini] *Battle Chess* is chess with amusing battle animations, and sometimes that's all you need from a game.

» [The A500 Mini] We'll never say no to a quick go on *California Games*, no matter what format it's on.

» [The A500 Mini] Serious flight simulators aren't a staple of mini retro console libraries, so it's nice to see *F-16 Combat Pilot* being included.

TAKING BACK CONTROL

WHY DOES THE A500 MINI USE A CONTROL PAD, AND HOW WAS IT MADE?

■ With all the attention given to creating an authentic Amiga experience, you might be confused as to why The A500 Mini doesn't come with a joystick as the primary controller, given that most players would have used one at the time. "The main factor was that modern users were not that familiar with using a joystick, they generally tend to use game pads," Chris says, explaining the decision. "Basically it's something that's more accessible to more users." However, there is an authenticity angle to this choice too. "The Amiga never shipped with a joystick officially, they were always third-party. However, it did ship with a game controller. Yes, it was latterly and it was the CD32, and it was not universally but *almost* universally hated. But that was the ergonomics of it, not the fact that it was a pad," he elaborates. "So when we were looking for what would be the truest thing to release with the Amiga, it was a pad."

Boldly, Chris and the team decided to use the CD32 controller as a starting point, and set about building a better version of the much derided accessory. "We got hold of some pads, we looked at what was wrong with them. We looked at years and years of the forum posts," he explains. "Because we were designing our own, we modelled a lot of the feel of the buttons and placements and things on a broad spectrum of controllers. PlayStation, Xbox, SNES pads – whatever we had at our disposal, and we went to town on it. And obviously, you know, choosing the best attributes from them all without hitting any patent issues or anything like that."

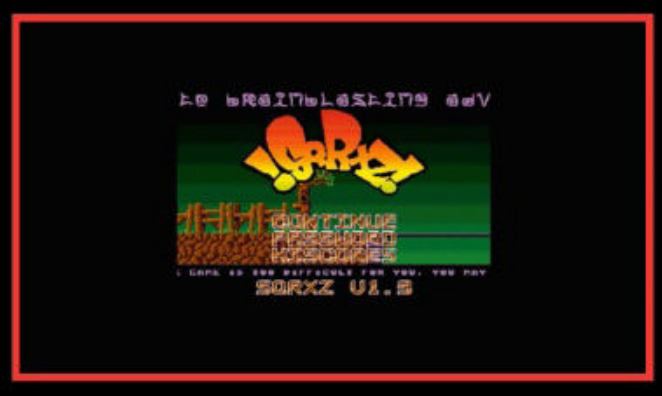
Comparing the new pad with the old one, the differences become obvious. The disc-shaped d-pad has been replaced with something more akin to a PlayStation d-pad, while the button layout is a more conventional diamond shape. Though the original button colour scheme has been retained, buttons now have standard letter designations rather than the original symbols. It's also smaller, being closer in size to a SNES or Saturn controller.

and HDMI on, it hasn't got all the other ports," says Chris. "The number of iterations we went through on that was huge. It's like weeks of work, really. I think the success is when you look at the back of it, it doesn't betray the fact that took a lot of work." Perhaps the most notable example of attention to detail is an option to turn on authentic LED behaviour on the machine itself. "I mean, some people just want the LED to stay on because they get a bit freaked out when the power light goes off. But we knew that there were going to be some Amiga users that actually would look at the LED," says Chris. "It was a bit of development work to kind of get it to work. We got into all sorts of situations where you come out of the game back to the carousel, and the LED is off. And it's like no, we need it to be on and making sure that state was maintained. Getting the testers to test it was difficult because they didn't know what the expectations were. We nailed it down in the end."

The mouse is externally similar to the original, though naturally the internals have been newly engineered, and fortunately it uses optical tracking. "It's an infrared optical mouse, not a red optical mouse," Chris quickly points out. "That was deliberate because of course, the original Amiga mouse would have had a trackball underneath it, so it wouldn't ▶

> *"With The C64, Protovision, Psytronik, RGCD have all made some pretty good business by offering original games for the full size and the Mini"*
> **DARREN MELBOURNE**

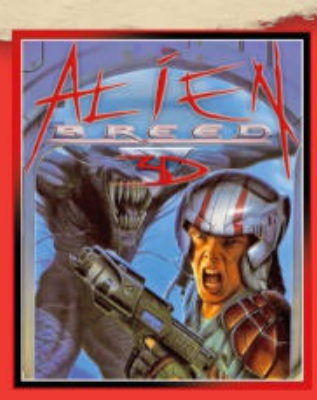
4 This time a file listing menu will appear, so select the LHA file containing your game. You can use the Menu button to make configuration changes.



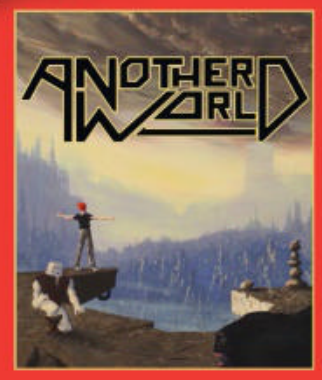
5 Once you're ready, the Home button starts the game. Easy peasy! Each game added by USB gets its own save slots, thankfully.

GAME ON

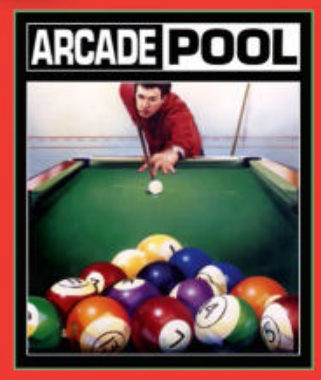
THE FULL LIST OF GAMES INCLUDED WITH THE A500 MINI



ALIEN BREED 3D
1995 • Team17

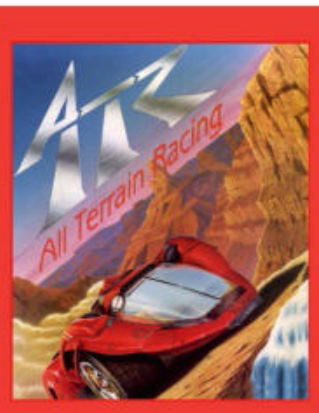


ANOTHER WORLD
1991 • Delphine Software



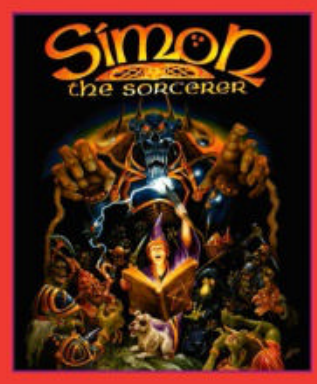
ARCADE POOL
1994 • Team17

ALIEN BREED: SPECIAL EDITION 92
1992 • Team17

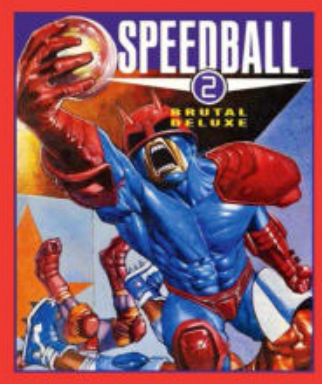


ATR: ALL TERRAIN RACING
1995 • Team17

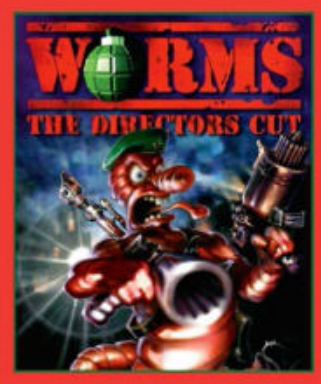
PROJECT-X: SPECIAL EDITION 93
1993 • Team17



SIMON THE SORCERER
1994 • Adventuresoft

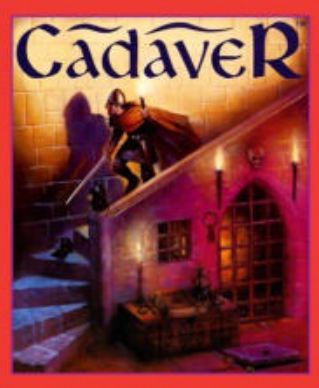


SPEEDBALL 2: BRUTAL DELUXE
1990 • The Bitmap Brothers

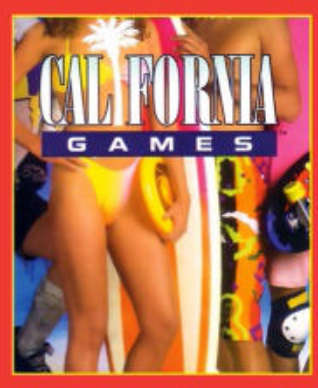


WORMS: THE DIRECTOR'S CUT
1997 • Team17

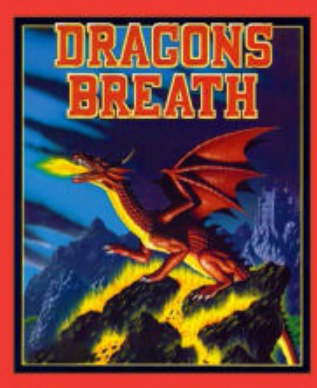
BATTLE CHESS
1988 • Interplay



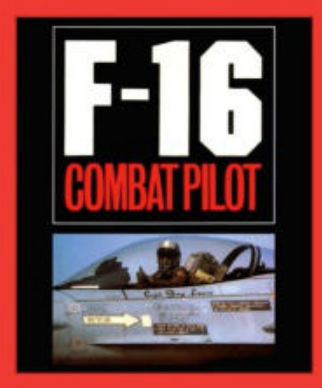
CADAVER
1990 • The Bitmap Brothers



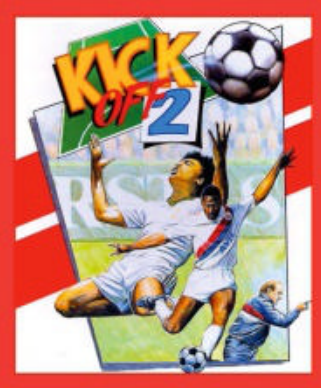
CALIFORNIA GAMES
1988 • Epyx



DRAGON'S BREATH
1990 • Outlaw

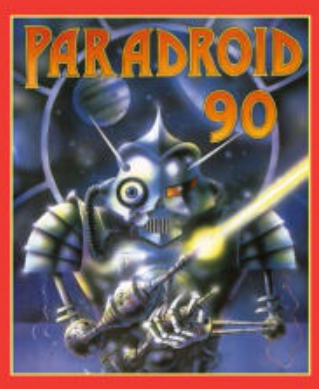


F-16 COMBAT PILOT
1989 • Digital Integration

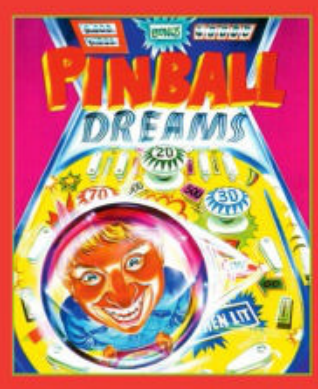


KICK OFF 2
1990 • Anco

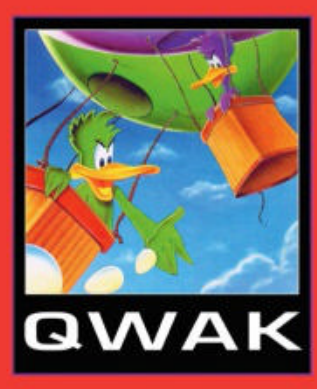
LOST PATROL
1990 • Shadow Development



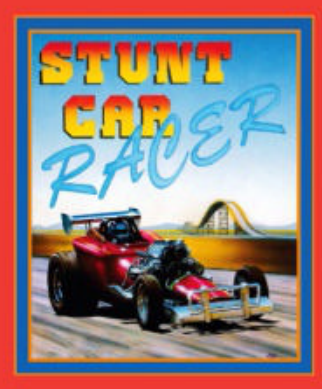
PARADROID 90
1990 • Graftgold



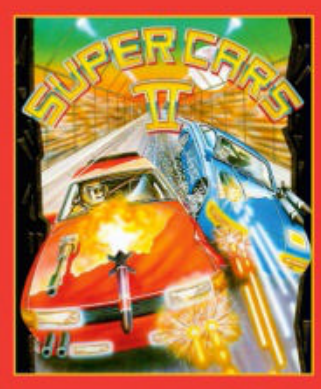
PINBALL DREAMS
1992 • Digital Illusions



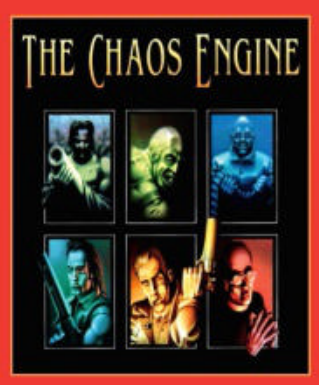
QWAK
1993 • Team17



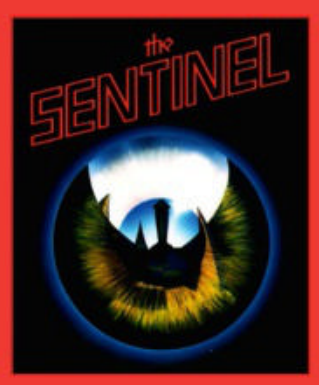
STUNT CAR RACER
1989 • Geoff Crammond



SUPER CARS II
1991 • Magnetic Fields

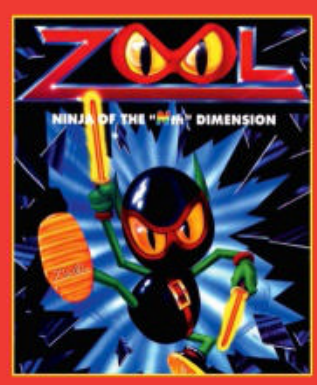


THE CHAOS ENGINE
1993 • The Bitmap Brothers



THE SENTINEL
1988 • Geoff Crammond

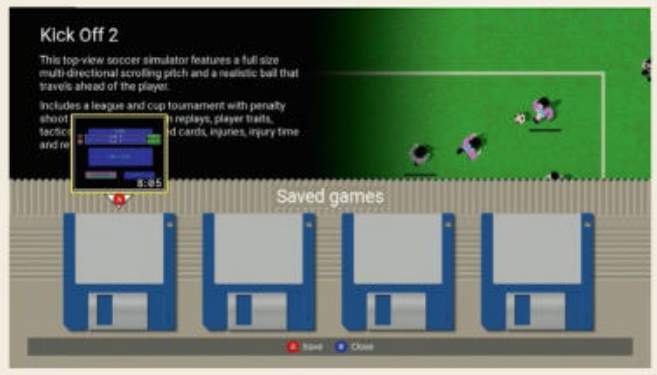
TITUS THE FOX
1992 • Titus



ZOOL
1992 • Gremlin Graphics

» [The A500 Mini] *Lost Patrol* is another game of a kind that just doesn't exist on the console-based retro systems.

» [The A500 Mini] *Arcade Pool* lets you take on a variety of opponents, many of whom will be familiar from old games magazines.



» [The A500 Mini] Four save slots are available for each game, and as expected, saves can be created at any time during gameplay.

have emitted any light. So we deliberately went for an infrared LED, not a red LED, because we wanted the Amiga mouse not to emit any lights, because it didn't back in the day. So there's some subtle design elements in there that most people would overlook." One choice that certainly isn't subtle, and is bound to raise some eyebrows, is the inclusion of a control pad as standard. You can read more about that in the Taking Back Control boxout, but it's a good pad that remains comfortable over long stretches of play.

Actually emulating the system has been a major challenge, which Chris tells us is because of the history of emulation. "A lot of the emulators that are out there now actually have core elements that started back in the Nineties and the early Noughties, and around that time they were generally on PCs. If you had a PC it was single core, so nobody bothered threading anything, no multiprocessing at all. So they're inherently sequential in the way that they go about emulating the CPU," we're told. "The big problem with The C64 was the SID chip was an absolute beast to emulate. I ended up having to massage things to get some parallelisation between the kind of core emulation and the SID emulation to get it to emulate within one frame because we lock to the HDMI. Throwing CPU power at it was fine, but it was clock speed, it wasn't cores."

"The Amiga is different," Chris continues. "The Amiga, again, doesn't really parallelise stuff. It hasn't got something that's as weighty as the SID to emulate, but it's got things like the blitter and copper and all that kind of stuff, which some games absolutely trash and thrash. So part of our struggle was trying to optimise the operating system and the drivers and everything to try and get as much performance out of the chip that we've got, as opposed to chucking cores at it, it's working with what we've got." He's confident that the ARM Cortex A53 used in The A500 Mini will do the job, though. "We've made sure that the 25 games that are on there run at the best quality, undetectably different to a real Amiga, they're just spot on." But of course, it's designed to run more than just those – how does it compare to other options? "It's more powerful than the Raspberry Pi 3B+, for instance," he assures us. "Basically it's run everything we've thrown at it, apart from one demo which just crucifies the chip. It can do that because the chips run in parallel on your real Amiga and they don't on an emulator, and an emulator is not set up to do that. You'd struggle on a Pi 4 to run that." In our own tests, we haven't found anything that troubles the machine.

> *"We've made sure that the 25 games that are on there run at the best quality, undetectably different to a real Amiga, they're just spot on"*
> **CHRIS SMITH**

The A500 Mini is like The C64 and many other retro gaming systems currently available in its use of 720p video output. However, with some machines like the Capcom Home Arcade and Evercade VS outputting 1080p instead, we were curious as to why the team stuck with the lower resolution. "With the Commodore 64, generally everything can be displayed within 240 lines. Scaling up to 720 is easy without any sort of artefacts," Chris reflects. "We found that a majority of the games on the Amiga fit in the same sort of scheme. Scaling up 720 without introducing any scaling artefacts is again relatively straightforward, because it's just a multiple of two or three. As soon as you go to 1080p, it's not quite another multiple. So you kind of get into a situation where you're ending up with top and bottom black borders that you wouldn't end up with if it stayed at 720. Plus it's a retro computer, and you're basically scaling a pixel up, getting more and more square."

» [The A500 Mini] *Qwak* is the kind of arcade-style platform game we just love, and it's another co-op game to boot.

» [The A500 Mini] The ninja from the Nth dimension Zool is here, and he's brought the Chupa Chups adverts back with him.

That's not to say the issue wasn't considered. "We could have run the user interface at 1080p, and you could argue that it'd be crisper and all that kind of stuff, but you're sitting across the room on a sofa. It doesn't need that," argues Chris. "The GPU would need more memory, there's more data to be transferred around, it'll impact the emulation. You've got to have a really, really good reason, it's got to give really good end user benefits for being 1080p over 720p to warrant doing that. It affects design decisions left, right and centre to get the performance. So that's why, it just doesn't warrant it."

Looking back at the way The C64 went, there will inevitably be questions surrounding the potential for a full-size A500. However, that's not something that the team is working on right now. "I think the success of The C64 Mini dictated the fact that it was potentially commercially viable for us to go ahead and build a full-size one, and I think the same will be the case here. If we sell enough A500 Minis that it looks like it'd be financially viable, then we'll plan it through," says Darren. "I think, as Chris will testify, the entire process of building a full size is infinitely more difficult, infinitely more time consuming and effort intensive, and far more expensive. So I think we have to be convinced the market is there, which is why we always start with the minis, because it is a cheaper enterprise to get to a quality end result."

> *"I think the success of The C64 Mini dictated the fact that it was potentially commercially viable for us to go ahead and build a full size one, and I think the same will be the case here"*
> **DARREN MELBOURNE**

"Yeah. It also becomes more of a computer, and so the expectations in terms of functionality from that changes, though arguably some users will have those expectations of the mini because we saw that with The C64 Mini. But having The A500 Mini out there first allows us to see what those expectations are," Chris confirms. In fact, some of the engineering issues have already been considered. "Keyboard wise, it's more of a traditional keyboard, certainly in terms of feel on the Amiga. So that will be relatively easier from a mechanical design complexity point of view than The C64," says Chris. "Basically, it had to feel exactly like the C64 keyboard. That development costs, but users would not accept a keyboard that was not the same travel and the same feel, as a C64 keyboard. However, we couldn't manufacture it using the same techniques and technologies as they weren't available, and they would have quadrupled the price of the keyboard."

That doesn't confirm production, though there's no doubting the enthusiasm that Chris and Darren have for the idea. "We've got minds to do it. But it does depend on success of the Mini," Chris concludes. "Absolutely, if we can find a way to make it viable, if we can find a way to make it work, we'd love to do one," affirms Darren. "But we're looking at least a year to 16 months down the line, I think, before that would become a reality." In that case, anyone looking to wait will be waiting for quite a while.

Having spent some time with The A500 Mini, it really does succeed in bringing console-style simplicity to the Amiga gaming experience, and we think that's something that the entire scene could benefit from. Though the Amiga's success was concentrated in Europe, the format is far from being forgotten thanks to the exceptional passion of its users and the high quality of its best games. But as we discussed earlier, and as Chris attested, the Amiga hasn't been an easy format to get into. Mini retro consoles sell so well precisely because many gamers value simplicity and convenience, and while we have no doubt that The A500 Mini will attract plenty of nostalgic former Amiga owners, what excites us is the potential it has as a gateway device that lowers the barrier of entry to the format and creates new Amiga fans.

With that in mind, we had to know which games Chris and Darren would recommend to those curious newcomers. "If it's your first introduction to the Amiga, I would say it's got to be something like *Alien Breed*, it's got to be something that's visceral, that you can immediately pick up and play," answers Darren. "I mean, *Worms* is obviously synonymous with the platform but it takes a little bit of setting up. Whereas something like *Alien Breed* or maybe *The Chaos Engine*, where it's literally pick up and play and you're straight into the action, it would be something like that for me." For Chris, Qwak is a highlight. "It's one of those ones that I'd not experienced before, and it's one I jump in and play now that it's on the console. *Project X*, I really like that. *Alien Breed 3D*, I have a lot of fun playing that." As for us, we jumped straight into *Pinball Dreams* immediately and if we didn't have a magazine to make, we'd still be playing it now – and now that we're done writing about The A500 Mini, we're going to turn it on and do just that. ✱

» [The A500 Mini] *Stunt Car Racer* inspired plenty of licensing-related sleuthing, but Darren Melbourne got there in the end.

You interested in any priceless, antique porcelain figurines.
Walk to
Walk to Look at Open Move
Consume Pick up Close Use
Talk to Remove Wear Give

» [The A500 Mini] The sarcastic humour of *Simon The Sorcerer* will surely go down well with both old hands and newcomers.

SHIPPING FORECAST

HOW GLOBAL LOGISTICAL CHALLENGES HAVE AFFECTED THE A500 MINI'S PRODUCTION

■ You'll have undoubtedly heard a lot about ongoing computer chip shortages in recent times. A huge number of consumer products have been affected, from consoles like the PlayStation 5 and Xbox Series X to cars and even ink cartridges for printers. As it turns out, The A500 Mini has managed to avoid at least some of that impact. "We've been lucky in that. Or lucky-ish, in that we are not using the current best of breed stuff, you know, we're using moderate RAM chips and all that kind of stuff," Chris explains. "The factory that makes them is literally on the same industrial complex as the company that manufactures our hardware." However, it hasn't been possible to dodge the issues entirely. "Flash storage is more complicated because it's the same technology inside there as in SD cards, so that's been more troublesome. But it's not availability as much as price, that's where we see that the hits really."

The disruption experienced in the shipping industry has been another major factor affecting The A500 Mini's journey to the shelves, and ensuring that the system would ship on time involved a disciplined approach to design. "In order to bring this into cost, and to guarantee that we can deliver on time, because this thing's got to be shipped over from China by boat – that takes ages – you've got to get things done early," Chris explains. "All the hardware and stuff needed to be designed and stuff, basically, for the summer last year, and the firmware around about that time, which is a really big lead time on getting them in the shops," he adds. But even with that lead time, Retro Games Ltd hasn't been able to avoid problems. "The costs are astronomical. That's had a massive impact," Chris starts. "In fairness, when you say astronomical, Chris, I think you should say they've gone up in about 14 months by between 600% and 700%. So astronomical was an understatement," Darren interjects. "Yes, yes. daft. For one container. So we have been hit, but nobody's unhit," Chris concludes.

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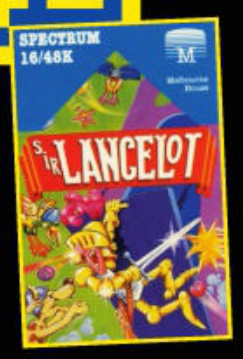
THE MAKING OF SIR LANCELOT

RELEASED IN 1984, IT WAS ONE OF THE LAST OF ITS KIND, A COMMERCIAL 16K SPECTRUM GAME AT A TIME WHEN SINCLAIR ITSELF WAS PONDERING ON A NEW 128K MODEL. BRAVE, SWIFT AND ALWAYS CONSCIOUS OF HIS IDIOM, THIS IS THE TALE OF SIR LANCELOT

Word By Graeme Mason

» Stephen Cargill today.



IN THE KNOW

» **PUBLISHER:** MELBOURNE HOUSE

» **DEVELOPER:** STEPHEN CARGILL, ANDREW ARNOLD & IAN PIUMARTA

» **RELEASED:** 1984

» **PLATFORM:** AMSTRAD CPC, ZX SPECTRUM

» **GENRE:** PLATFORM

1983 was an exciting time for Spectrum 16K owners, with the year producing a bonanza of brilliant releases. Think of *Deathchase*, *Jetpac*, *Harrier Attack* and there are guaranteed warm and happy memories for the majority of Spectrum gamers. But despite these wonderful games, the future had arrived, and the future was 48K. Luckily, no one had told teenager Stephen Cargill, whom but for a twist of the educational fates would not have even become a programmer in the first place. "For my O-level choices in school I really wanted to do metal work," admits Stephen. "But the course was full! I was pretty upset as they put me on their new computer studies course instead." This moment turned into a positive move for the young student. "I soon got the hang of it – they made the right choice for me. I loved experimenting and the excitement at getting some code working and optimising it."

Stephen's early experiences of computing were on a Commodore PET, complete with its small keyboard and built-in cassette recorder, and he was still tinkering around with the Sinclair ZX81 when advertisements for its successor began to appear. "When I heard the Spectrum was coming out, I immediately sold my ZX81 in the local paper," he remembers. "I didn't get much less for it than I paid for the Spectrum a few weeks later. It was a huge upgrade – the colour display and moving keys were fantastic."

After writing a handful of demos, Stephen's first game was a *Space Invaders* clone called *Attack Of The Mutant Micros*. "The invaders were graphics of computer-related things such as an RM380Z and Clive Sinclair. I've still got a cassette and I really should get it ripped at some stage to see what it's like." While **Retro Gamer** is naturally excited that we may have unearthed a lost Spectrum classic, we'd better move on to *Sir Lancelot*. Surely Stephen was a big fan of the work of the legendary Matthew

» [ZX Spectrum] It's adventure time. Off he goes!

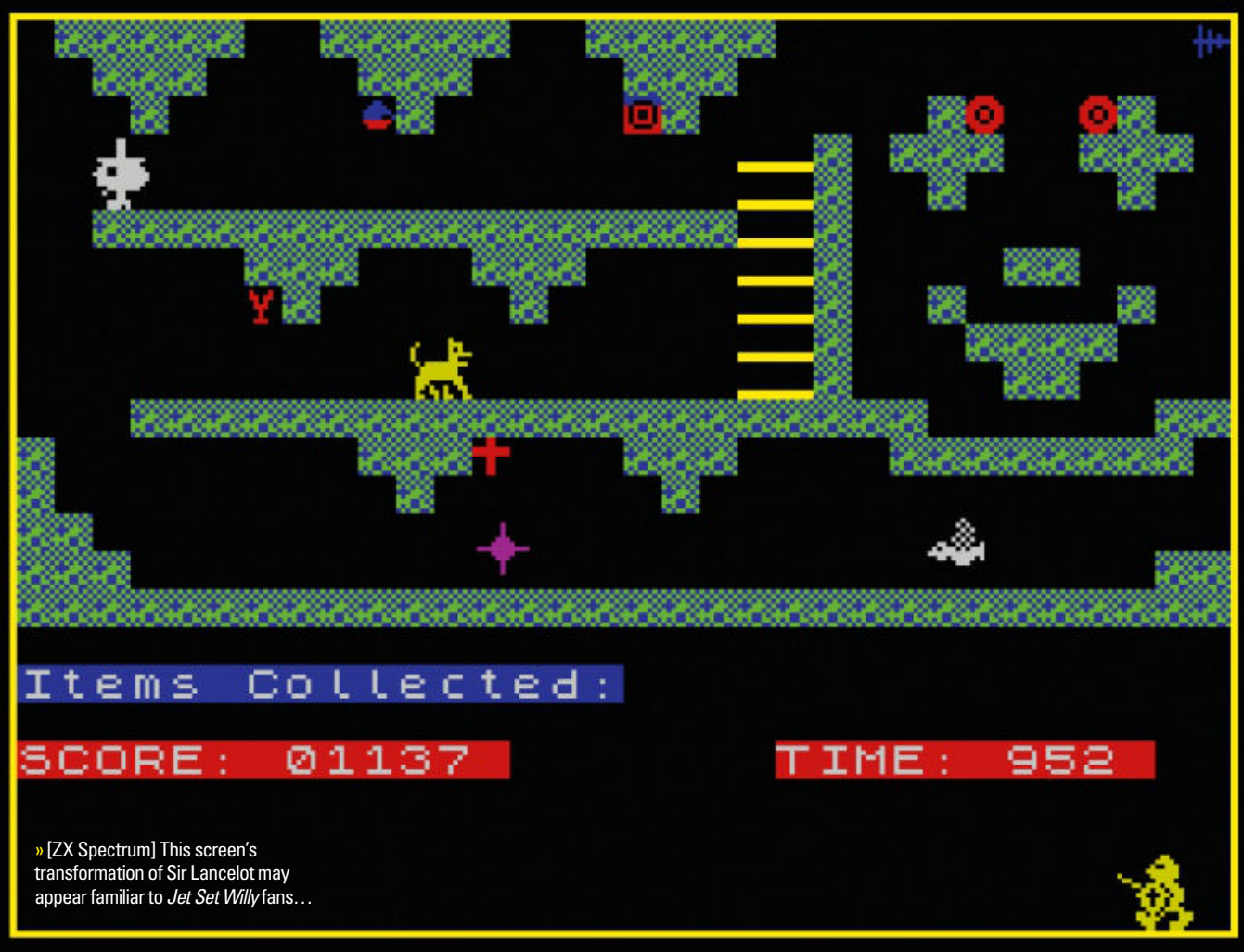
» [ZX Spectrum] Many strange creatures patrol the castle.

DEVELOPER HIGHLIGHTS

FIGHTING WARRIOR
SYSTEM: ZX SPECTRUM, AMSTRAD CPC
YEAR: 1985

SHAO-LIN'S ROAD (PICTURED)
SYSTEM: ZX SPECTRUM, AMSTRAD CPC, C64
YEAR: 1986

GARFIELD – BIG, FAT, HAIRY DEAL
SYSTEM: ZX SPECTRUM, AMSTRAD CPC, AMIGA, ATARI ST
YEAR: 1988



» [ZX Spectrum] This screen's transformation of Sir Lancelot may appear familiar to *Jet Set Willy* fans…

SIR LANCELOT GOES FORTH

HOW DID THE BRAVE KNIGHT FARE ON HIS MISSION ACROSS THE SPECTRUM AND AMSTRAD?

AMSTRAD CPC

■ Converting his debut game to the new Amstrad CPC computer was Stephen Cargill's first role at Melbourne House and it was a daunting task for the young coder. Nevertheless, it's an admirable attempt to improve *Sir Lancelot* thanks to the extra memory on offer and it makes the game one of the better early efforts for the system. Sir Lancelot himself may have lost a bit of zip, but the additional colour, sound and the ability to choose the level order – courtesy of Merlin's Magic Teleport Chamber – improves the game beyond the Spectrum original.

ZX SPECTRUM

■ Quickly coded with help from his two friends, *Sir Lancelot* is a remarkable freshman effort from the trio of students. Offering 24 screens, each one deviously plotted and replete with valuables to collect and enemies to dodge, the game has a super-fast arcade feel to its gameplay, a step away from its often ponderous peers. Extra touches such as the marching spare lives at the bottom of the screen and some crunching sound effects belie the youthful nature of its creators and ensure that *Sir Lancelot* remains one of the best 16k games around.

Smith? "I was a huge fan of *Manic Miner* and *Jet Set Willy* – I'm amazed you spotted a resemblance…" he grins. Along with his friend Andrew 'Arnie' Arnold, Stephen designed and plotted his platform game around the legend of the famous Arthurian knight. "I wasn't a great reader but I did know a bit about the legend of King Arthur. As I've grown older I've come to appreciate the world's history more; there are countless incredible stories out there and I now recognise a few games of the time that drew on them for their characters and inspiration."

> "WHEN I HEARD THE SPECTRUM WAS COMING OUT, I IMMEDIATELY SOLD MY ZX81 IN THE LOCAL PAPER"
>
> Stephen Cargill

The story of Sir Lancelot is as lean and trim as the game itself. The heroic knight is exploring a strange castle, his task to collect all the valuable items that reside in each room. Once these items have been acquired, the exit appears and Sir Lancelot can progress to the next chamber. However, as the back cover to the game's cassette inlay gleefully admits, there are many hazards in Lancelot's journey. "You are Sir Lancelot and you have to avoid the many perils placed on your path to the Holy Grail. A bird, dog, pacman [sic] and cooking pot with legs???"

With Stephen having moved on to the next stage of his education, A levels, *Sir Lancelot* also moved forward, and even gained a tune of sorts, courtesy of fellow student Ian Piumarta. "Ian was incredibly gifted and passionate about music, maths, electronics and computing – a truly incredible person," remembers Stephen. Working any sort of tune into a 16K Spectrum game was challenging – together with Ian, Stephen squeezed approximately sixty seconds of Bach's T*occata And Fugue In D Minor* into around 50-100 bytes of code.

With the Spectrum itself requiring a few K for its operation, there was around 8 to 9K left for the software. The 48K model was now firmly entrenched; so just why did Stephen and his friends decide to create a game for the lesser model? "It was possibly the publisher, but I think there wasn't enough in it for a 48K game," he says. "Plus, we thought the 16K market was being neglected." The decision meant that little extras such as naming the rooms (as in *Jet Set Willy*) could not be included as *Sir Lancelot* was squeezed and compressed down to the last byte.

Talking of Matthew Smith's platform classic, it's impossible not to feel the influence of Miner Willy in *Sir Lancelot*. One character, a bird with stippled wings, looks particularly familiar. "I don't recall the origin [of the bird] but we initially wrote the game as a group of mates just playing around," recalls Stephen.

» [ZX Spectrum] Despite his suit of armour, Sir Lancelot is a nippy fellow and makes short work of obstacles such as this.

MEDIEVAL MADNESS

MORE MIDDLE-AGE MAYHEM ON THE ZX SPECTRUM

BRIAN BLOODAXE

Various Viking factions raided the British Isles from the eighth century onwards. Taking place one Thursday a few years later, *Brian Bloodaxe* stars the eponymous barbarian, raiding and pillaging to his heart's content. Don't forget to gather those crown jewels so Brian can finally plonk himself on the throne and kick back until retirement.

CAMELOT WARRIORS

Four renegade objects have been transported into the realm of King Arthur and his brave knights. Throughout the dangerous (actually, *very* dangerous) medieval world, this brave warrior must locate these items before escorting them to their relevant guardian for destruction. Fortunately, the hero possesses an extremely sharp sword in this devilishly tough game from Dinamic.

THANATOS

Welcome to the fiery realm of Thanatos The Destroyer, a huge dragon that takes sincere pleasure in turning foolish knights into piles of ash. Fortunately YOU are Thanatos, flying, walking and swimming across the landscape, causing havoc wherever you go. Throughout this mythological medieval world, Thanatos rampages, merrily toasting half the soldiery in the land.

» [ZX Spectrum] Sir Lancelot has once more transmogrified into a sprightly avian.

» [ZX Spectrum] This is one sturdy knight – even a long fall will not harm Sir Lancelot.

"WE THOUGHT THE 16K MARKET WAS BEING NEGLECTED"

Stephen Cargill

"So I'm sure there was a lot of inspiration from all the other games we played." As in the famous Nightmare Room from *Jet Set Willy*, Sir Lancelot occasionally transforms into this winged creature. "We probably did it for the gameplay, to add a bit of variety to the look and also to confuse the player a bit," notes Stephen. Conversely, as opposed to Miner Willy, Sir Lancelot cannot die from falling, making the game a touch less fearsome in places. "I suppose it does make the game easier, but it's a fundamental part of the gameplay," says Stephen. "*Sir Lancelot* is challenging enough without adding more ways to lose a life!"

This is certainly true. After a simple first screen, the game's rooms often require much thought and planning in order to collect all the items and progress to the next. Sir Lancelot's jump is nowhere near as high as Willy's – he *is* wearing a full suit of armour, after all – meaning he cannot jump over enemies. Additionally, with ladders only working one way, upwards, it's all too easy for a careless Lancelot to find himself trapped with the clock quickly running down or an enemy closing in.

Being the early Eighties, development systems for use with the ZX Spectrum were not common, especially for a poor student such as Stephen. "Compared to modern development environments it was incredibly basic, but that's how it was," he remembers. "I had to develop on a 48K model Spectrum in order to have the tools loaded and then put the tape image together. I vaguely recall just monitoring memory so it never went above the 32K memory boundary before testing it on a real 16K machine." That's not to say there was zero technical assistance. Stephen was an early adopter of HiSoft's DevPac assembler and frequently discussed its merits and flaws with its creator, David Link.

Stephen estimates that *Sir Lancelot* took roughly two to three months to program, alongside his studies. "We were friends, so we did the game while socialising, really for our own fun. And quite a lot of beer was involved!" With the Spectrum's memory constricting the number of animation frames available, the result was a fairly zippy main character, giving the game breathing space away from its influences, "It did make it gripping to play, a fast and exciting arcade game rather than a slow and thoughtful puzzle," notes Stephen. Of course, there were issues, and the problems that Stephen encountered with *Sir Lancelot* will be familiar to those of you that have read many of the previous Spectrum Making Ofs in **Retro Gamer**. "I used the Sinclair ZX Microdrive which was pretty unreliable," bemoans Stephen. "You had to make sure you had a good number of backups – including on cassette – for your work. It was much faster than tape, but definitely problematic." Yet possibly the biggest issue was inexperience. "There wasn't an internet, no manuals about serious games programming, not even bulletin boards for the Spectrum world. We were simply learning as we went along."

With *Sir Lancelot* in the can, Stephen began exploring options for publication. "I wrote to

THE CURSE OF SHERWOOD

Robin Hood and his Merry Men have a new enemy, the Evil Cult Of Sagalia. This diabolic band of religious fanatics are taking over Sherwood Forest and only one man can stop them. No, not Robin this time – it's actually Friar Tuck! Armed with magic spells and a blade, can the valiant friar foil the cultists and lift the curse?

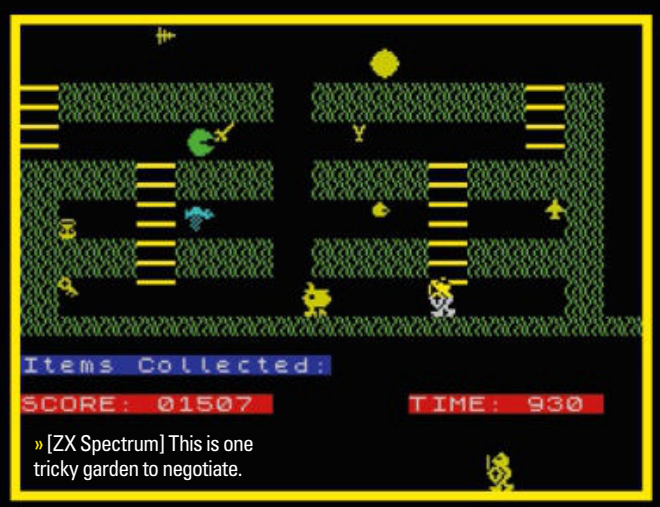
CAVELON

The foreboding castle towers above the knight, six floors of enemy warriors and worse awaiting him. In order to ascend, he must gather all the segments of the exit door. With antagonistic swordsmen and archers in your way this is no easy task – fortunately this knight can invoke the legendary sword Excalibur, giving him invincibility, albeit temporarily. Hurrah!

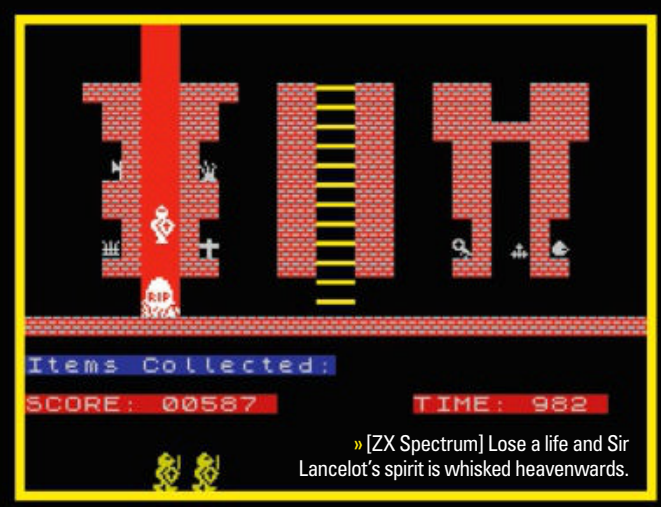
» Stephen, complete with shaggy long hair, in 1985.

"I'D INITIALLY DONE [SIR LANCELOT] AS A FUN HOBBY; THEN TO GET IT PUBLISHED AND GET A PROPER JOB FROM IT WAS SO EXCITING"

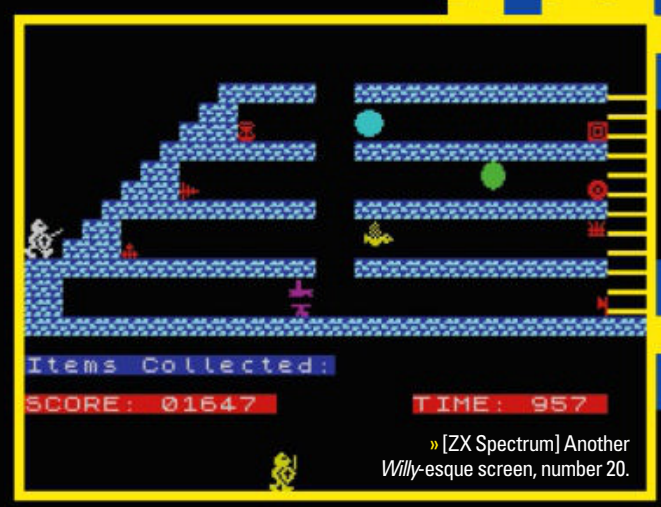
Stephen Cargill



» [ZX Spectrum] This is one tricky garden to negotiate.



» [ZX Spectrum] Lose a life and Sir Lancelot's spirit is whisked heavenwards.



» [ZX Spectrum] Another *Willy*-esque screen, number 20.

several publishers, sending off a cassette with the almost-complete game on, and Melbourne House had the best offer." In the summer of 1984, the young man journeyed down to the Computer Show at Earl's Court to meet with the publisher and seal the royalties-based deal. Just a few months later, *Sir Lancelot* was in the shops and inside the pages of *Crash* magazine as a surprise Crash Smash. "This is the best 16K game I have seen in a long time," opined one reviewer. "It has all the graphics and playability of *Manic Miner* and four more screens as well!" Stephen and his friends were *quite* pleased. "It was absolutely incredible!" he exclaims. "I've still got the framed review and advert – I think I'll have to get it back on the wall for a while!" Yet despite the praise, does Stephen think he could have done anything differently, looking back today? "Possibly some way of saving the level, perhaps printing a code for your score and lives?" he ponders. "But I'm not sure that's a good idea for this type of game as part of the challenge is to get through it in one go. I don't think we had any spare code space anyway!"

At this point, Stephen was still at school, but that was about to change. "I'd initially done [*Sir Lancelot*] as a fun hobby; then to get it published and get a proper job from it was so exciting," he says. Stephen moved down to Melbourne House's offices in Richmond, south-west London and had time to write slash-'em-up *Fighting Warrior* before moving on again. "I wrote a game of my own and that is when I confirmed I wasn't a games designer and really should stick to programming," he admits. Employment at The Edge followed, and a number of conversions before writing the *Garfield* games for the same company. As with most people in the industry, Stephen eventually moved to the 16-bit computers, finding himself working at those fine purveyors of Atari ST and Amiga games, The Bitmap Brothers. But none of it would have been possible without that rapid little knight on a quest to plunder as many valuables as he can find from a very peculiar castle. "It was a really good time, quite pioneering really," concludes Stephen wistfully. "The computers were open, they started with a command prompt and had full manuals detailing the operating system and programming language. *Sir Lancelot* was the first program I really had to finish and polish and that final tweaking is often what takes the time and gets a little tedious. But it needed to be done and makes for a better result – and I think *Sir Lancelot* was quite groundbreaking for what could be squeezed out of a 16K Spectrum." We agree, and on revisiting this demanding 16K classic it only remains for us to wish good luck to the brave Sir Lancelot.

NES Controller fact

■ Although original 'dogbones' are long out of production, the pad is popular enough that companies such as Retro-Bit and Tomee are still manufacturing their own NES compatible versions today.

NES Controller

» PLATFORM: NES **» RELEASED:** 1993
» COST: $14.95 (launch), £90+ (today, boxed), £20+ (today, unboxed)

When Nintendo redesigned the NES in 1993, it also took the opportunity to remodel the console's official control pad. The result was the NES-039 controller, an evolution of the original NES-004 device which retained all of the features of the original, but accounted for advances in controller design since 1985. The NES-039 became the standard controller bundled with consoles in multiple regions, accompanying the AV Famicom in Japan and the top-loading NES-101 in North America and Oceania. It was also sold separately, with the box touting its new design and compatibility with all NES consoles.

Ergonomic improvements are the primary benefit of the redesigned pad. Taking cues from the design of the SNES controller, the body features rounded ends that resulted in the device's popular 'dogbone' nickname. The d-pad is a little larger than that of the original NES controller, the Start and Select buttons have been angled similarly to those of the SNES pad. The main action buttons are now convex rather than concave, and have also been laid out at an angle. This makes for a controller that is generally more comfortable than its predecessor, and preferred by many NES enthusiasts.

ESSENTIAL GAME

CONTRA

Konami's classic run-and-gun is one of the most action-packed games on the NES. Whether you're mowing down countless waves of bad guys in the side-viewed stages or battling your way through corridors, the intense assault just never lets up. In fact, the game is so relentless and brutally difficult that many players instinctively enter the Konami Code to gain extra lives, not even entertaining the thought of trying to tackle it without them. With all that in mind, don't you think that you should be using a comfortable controller, rather than one that digs into your palms?

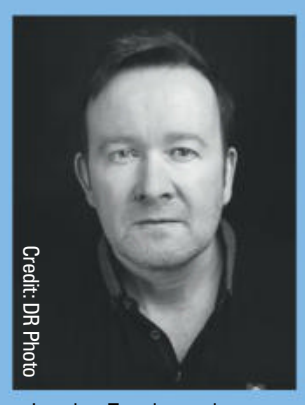
SUPPLIED BY
EVAN AMOS

THE STORY OF CJ THE ELEPHANT

CJ THE ELEPHANT DIDN'T PACK HIS TRUNK WITH THAT MANY GAMES BUT THE CHARACTER'S IMPACT HAS NEVER BEEN FORGOTTEN. SO LET'S GO OFF WITH A TRUMPETY-TRUMP AND SEE HOW CJ CAME TO BE, WHILE ALSO LOOKING AT WHAT COULD HAVE BEEN

Word By David Crookes

Jonathan Temples has very fond memories of *CJ's Elephant Antics*, the Codemasters game which introduced another cutesy videogame character a smidgen more than 30 years ago. As the graphics artist on a critically acclaimed, best-selling title that was fun to play and oozing with charm, he's immensely proud of what he and his fellow developers achieved. Yet the game almost didn't happen.



» Jonathan Temples works as a freelancer, creating 2D illustrations for children's books, 2D animation and artwork, and TV and film storyboards.

Jonathan's cousin, David Clarke, had been a developer at Choice Software in Northern Ireland, working alongside boss Colin Gordon on the Commodore 64 conversion of *The New Zealand Story*. As a young teenage graphics artist, Jonathan was drafted in to create the visuals but then publisher Ocean Software took the project in-house, a decision which left Jonathan and David looking elsewhere for work.

Rather than become an employee, David set up Genesis Software along with Jonathan and Ashley Hogg, a friend they'd met at a game shop in Belfast. "Ashley could code and create music and the three of us began developing more games," Jonathan says. They began with *Spellcast*, a promising title inspired by *Ghosts 'N Goblins* and *Barbarian*. But despite the developers making a single, impressive level, they couldn't find a publisher willing to take it on.

Spellcast ultimately ended up on the covertape of issue 74 of *Zzap!64* but the small Genesis team had far better luck with its next game. Rather than waste his abandoned code for *The New Zealand Story* and the rudimentary map that had been created, David decided to use it as the basis for a new title with a fresh character. "We wanted a silly character and considered a dinosaur," recalls Jonathan. "David and I both liked elephants, though, and it sort of fell down to that."

Slowly but surely what would become CJ, an anthropomorphic land mammal, began to emerge, and one of the key early moments was the decision to give the elephant an umbrella. "David always believed a lot of platform games had characters that fell far too quickly and he didn't like players not knowing what they were falling on to," Jonathan explains. "Then we thought, well, an umbrella

» [C64] *CJ's Elephant Antics* was certainly of its time. Here the French enemies include frogs and snails.

» [C64] The end of each level in *CJ's Elephant Antics* saw CJ go head-to-head with a boss, here the Hunchback Of Notre-Dame.

» [C64] Each location in *CJ's Elephant Antics* was themed using familiar landmarks such as the Eiffel Tower in France.

» [C64] Genesis packed *CJ's Elephant Antics* with ideas reflective of the locations including this fun ski-lift section.

couldn't hold an elephant but it would be funny if he could use one to slow his fall." It became an integral part of the game.

By allowing CJ to float to the ground, the developers felt players could exert greater control over the character, giving them a chance to prevent the elephant from colliding with one of the many hazards spread throughout the game. There would be spikes, water, moving platforms and a varied cast of weaponised enemies among an assortment of other hazards. A deft mid-air move here and there would often be the difference between survival and death.

> "WE WANTED A SILLY CHARACTER AND CONSIDERED A DINOSAUR"
> Jonathan Temples

To ensure the game was fair, the team spent much of their time designing each level. "I would draw them on paper and David would say what he liked and didn't like and I'd tweak things," Jonathan says. "David was constantly playing the game and game testing, and he'd tweak the levels over and over to make sure they were right." The developers also wanted to ensure players would remain motivated so they decided that each level would be set in a different location.

"The idea was that CJ had been captured and was on his way to a zoo when his cage burst open and he managed to escape," says Jonathan. "Players would help him to return to Africa by travelling through different countries." Jonathan relished the opportunity to create different enemy sprites and backgrounds and the team got stuck into producing puzzles that best fit a location. "We wanted each level to look different because we believed games that didn't have a change of scenery were very boring," Jonathan continues. To create the graphics, he used Anthony Crowther's Three In One editor for background characters and sprites, while also writing a block editor and using a mouse-driven C64 drawing package called NEOS Mouse Cheese. "We put all of our passion into the game," he says.

Paul Ranson remembers the fledgling game landing on his desk. "I was the development director at Codemasters and the company had a strategy at the time to produce games based on cartoon characters," he says. "The strategy was inspired by *Dizzy*, the Darling family and Philip and Andrew Oliver who all knew that our market was about pre-teens and wholesome family games."

Jonathan says Genesis initially sent one level, located in France. "That's where the plane

» [C64] There's no mistaking this location in *CJ's Elephant Antics* but randomly floating blocks made the backdrops feel a tad less real,

» [C64] The bonus levels in *CJ's Elephant Antics* linked the game's four levels but they were not in all versions.

CANCELLED GAMES

THE CJ SERIES COULD HAVE REALLY TAKEN OFF!

Pete Ranson loved the *CJ* series and he wanted to create more games involving the character. "I designed a number of other titles with CJ as the main protagonist that just never saw the light of day," he says. "We had also started making a Mega Drive version that had swinging platforms with CJ using his umbrella as a kind of sword to beat back enemies or to hook on to zip lines and so on but the lead coder I was teamed up with went AWOL and the project collapsed."

One of the cancelled games was *CJ In Space*. According to issue 84 of Amstrad Action in September 1992, this was going to be on a *Cartoon Crackers* compilation making it the first *CJ* game to appear on the CPC. It was also mentioned in the Early Warning Scanner in *Commodore Format* magazine. Intriguingly, at the end of *CJ In The USA*, David Clarke actually had the elephants getting into a shuttle and taking off (see the image below).

CJ's 4TH Adventure had better luck. Although it was also canned, the game was actually completed and it ended up being released on a German diskmag called *Magic Disk 64*. Renamed Jimbo and written by a totally different team to the previous games (Juned Wahab, Shaun Pearson, Wayne Billingham and Gerard Gourley), it was set to become the sequel to *CJ In Space*. There was also going to be another entry called *CJ Island Antics* but that wasn't released either.

CONVERSION CAPERS

CJ'S ELEPHANT ANTICS WERE NOT CONFINED TO THE C64

COMMODORE 64

■ Genesis pulled a blinder with *CJ Elephant Antics*, creating a budget game out of unwanted *The New Zealand Story* conversion code that could easily have sold at full price. Boasting the bonus stages absent in many other versions, it proved to be a fast, smooth-scrolling affair, topped off by Ashley Hogg's catchy tune.

ZX SPECTRUM

■ Converted by R Fred Williams of Big Red Software, the Speccy version suffered from colour clash, an annoying tune and jerky scrolling. Yet it remained a beautifully presented port with detailed graphics and awesome animation that saw CJ's trunk swish as he walked. Improved jumping with no ceiling collisions, it was easier to play too.

AMIGA

■ It's a shame this port – created by Genesis – lacks the C64 intro and instead tells the story using vertically-scrolling text. Get into the game itself, however, and that omission is forgiven. Although the C64 edges it overall, the Amiga version sparkles with colourful graphics and a fantastic tune. It also includes the bonus stage.

ATARI ST

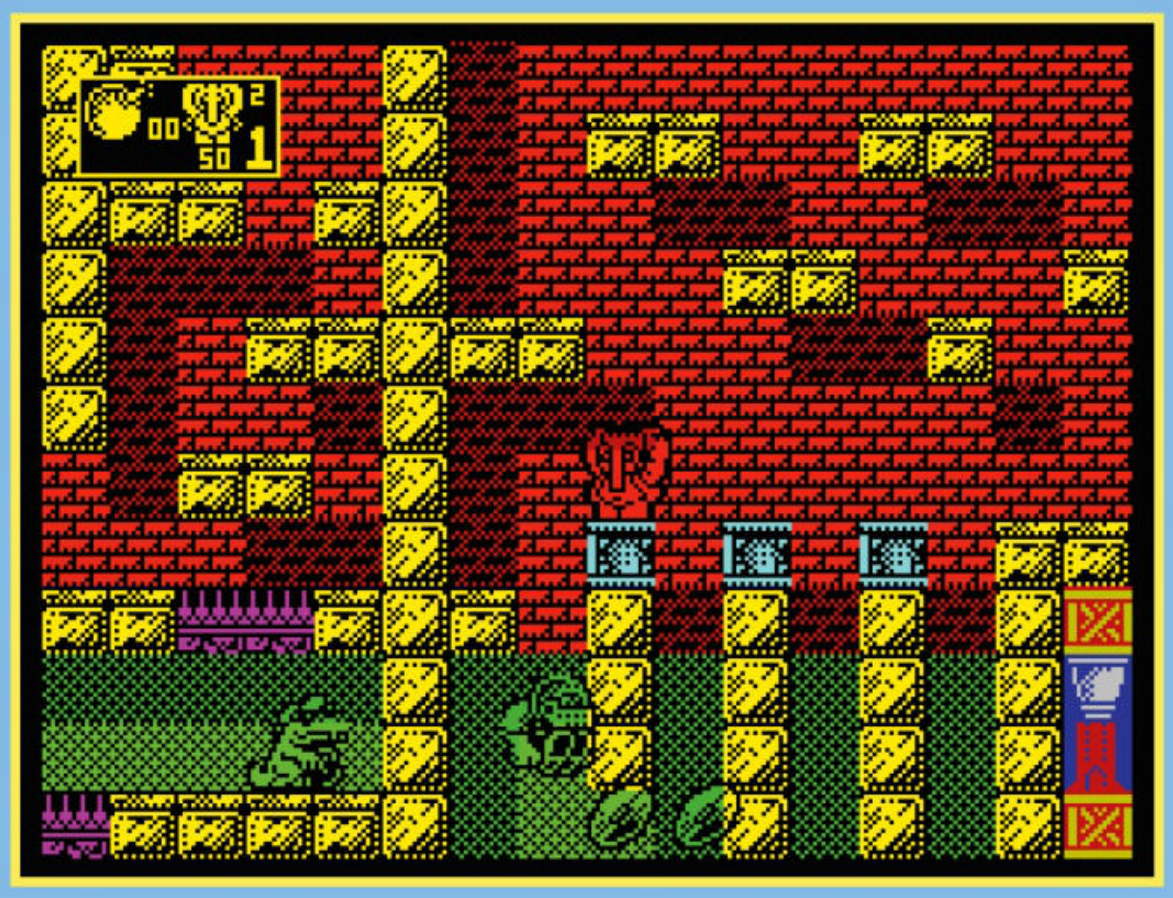
■ Although pretty much a carbon copy of the Amiga version, this well-presented port jiggled the screen layout around a little, putting the player stats down the right-side of the screen. It also dropped the bonus stage so that, as with (most of) the non-Commodore versions, the four levels simply ran into each other.

NES

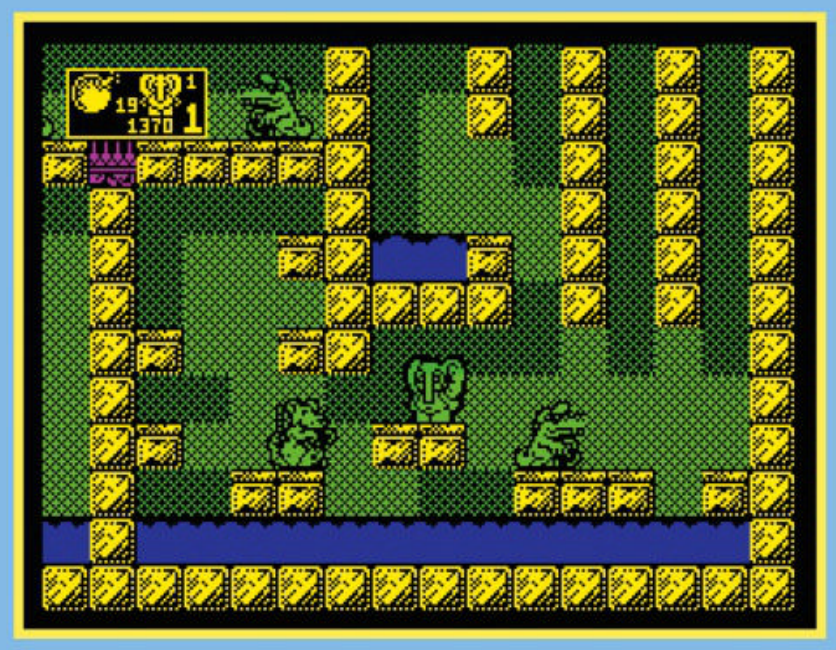
■ Released as part of the Quattro Arcade compilation, *CJ* was bundled with *Stunt Buggies*, *F16 Renegade* and *Go! Dizzy Go!*. But while it was bursting with colour, the graphics appeared less detailed and there were some gameplay changes that didn't quite work such as having CJ speed up after drinking soda.

PC

■ There were a few visual tweaks distinguishing the PC version from the Amiga such as running the story text horizontally along the bottom of the intro screen and making the player stats section look a tad sleeker. But, music aside, there wasn't much to choose between them. The DOS version even had bonus stages.



» [ZX Spectrum] Unfortunately, the Spectrum versions of the series, including *CJ In The USA* suffered from colour clash.



» [ZX Spectrum] The Spectrum was the lead platform for *CJ In The USA* and it tasked players with finding CJ's elephant family.

» [ZX Spectrum] CJ landing himself in some awkward situations in *CJ In The USA*. This part of the game had plenty of traps.

"I HAD RELEASED SOME DEMOS FOR THE AMIGA AND I WAS ITCHING TO DO A GAME"
Ashley Hogg

was flying when CJ escaped," he expands, "so it gave me the opportunity to draw the Eiffel Tower and the Hunchback Of Notre-Dame as the final boss character for the first level. Codemasters liked it but they came back and said it just needed a bit more front-end work."

This request did cause a bit of confusion however. "We thought the front-end work meant an intro so we created one, nodding to adventure films such as *Indiana Jones*," Jonathan laughs, of a short animated intro that was added at the beginning to set out the story. Still, it proved a nice touch and Codemasters liked the game enough to agree to publish. "*CJ* fitted into the mix really well, "Paul says. "So it was a simple decision to commission it."

Genesis then added Switzerland, Egypt and Africa as locations, making some quirky decisions, most notably penguins in the Alps. "I wanted the ski slopes in there, too, and David created good AI, with snowmen who would throw balls that would bounce down the hill after you." Egypt was largely influenced by the cover of Deluxe Paint on the Amiga. "I loved the image of the Tutankhamen mask and I wanted to draw the sphinx and include pyramids, pharaohs and mummies."

» [C64] Yes, that is the Ku Klux Klan in *CJ In The USA*. "We copied the Spectrum version," says Jonathan Temples, "but you wouldn't get away with stuff like that now."

In between the locations, the developers included subgames where CJ would ride a bike, leap over obstacles and catch balloons while avoiding enemies. "They were David's way of getting CJ from one place to another but they were a bit unplayable with minimal graphics since we only had 64K to play with." David added an original two-player mode as well. "He always wanted to enjoy a two-player scrolling platformer but the difficult part was working out how to achieve it," Jonathan explains. "The answer was to focus on one of the two characters. The character at the furthest part of the screen gets control of the scroll. If that caused the other character to fall off the screen, that one would lose a life. It was a brilliant idea and I don't know if it was the first time that was ever done in a game but it was certainly the first in a budget game."

Ashley Hogg created the music for *CJ*, a cheerful bouncy tune that was great to hum along to. "I don't think I was going for a specific atmosphere, more that I wanted to come up with a tune which had 'drive' and was upbeat," he says. "This was my first commercial C64 music and I was still refining my music driver routine. The seed of it was the bass line, which took inspiration from the *Stormlord* in-game music by Maniacs Of Noise. This was an absolute favourite of mine at the time."

In addition to sorting out the music on *CJ's Elephant Antics*, Ashley also coded the Atari ST and Amiga versions of the game. "Dave and Jon showed me an early work in progress of the C64 game and I said I'd love to convert it to the Amiga," he says. "At the time I had released some demos for the Amiga and I was itching to do a game, this seemed like the ideal opportunity. I don't recall if I had the C64 source code or not, but I didn't really need it."

The Spectrum version, however, was passed to Big Red and the task fell to R Fred Williams. "When the C64 version came through the post, we found it was great fun," Fred says. "But we didn't have the original source. We didn't have the original graphics or map data so Pete Ranson copied the level designs by hand."

Big Red dropped the intro and the bike section. "This was a memory issue," Fred says. Scrolling was also jerky. "It had big 16-pixel lumpy scrolling but it was cheap, quick to write and quick on the CPU," Fred explains. Yet the graphics had great detail, right down to the status bar and they were rightfully praised in reviews.

"The C64 needed its character set for the levels but the Speccy had a bitmap screen to play with and could be more extravagant," Fred says. "The

Elephant Antics

CJ ISN'T THE ONLY ELEPHANT TO STAR IN A VIDEOGAME

TEMBO THE BADASS ELEPHANT

■ Game Freak's 2D side-scrolling platformer was released for the PS4, Xbox One and Windows in 2015 and it had something of a *Sonic The Hedgehog* vibe. Players could navigate past various obstacles while smashing their way through the scenery across 20 smartly-designed primary levels. He could also spray water from his trunk.

ROLO TO THE RESCUE

■ Created for the Mega Drive in 1992, *Rolo To The Rescue* was a child-friendly platformer that had players collecting keys and defeating poachers while rescuing captive animals. Once freed, those animals would then join Rolo, with players able to make use of their individual abilities. Watch out for James Pond in the second moon level.

YONO AND THE CELESTIAL ELEPHANTS

■ This puzzle mini-adventure for the Nintendo Switch and Windows has been compared to *Zelda* in terms of its looks but it's not really on the same level. That's not to say it's any less playable, on the contrary, it packs a mighty challenge in its trunk through a series of well-created block puzzles. It's certainly worth trying if you like puzzle games.

DONKEY KONG COUNTRY 3: DIXIE KONG'S DOUBLE TROUBLE!

■ Making her debut in *Donkey Kong Country 3*, Ellie The Elephant has appeared in a handful of games since, including *Donkey Konga* and *Donkey Kong Land III*. One of the trickiest tasks for gamers appears to be getting Ellie to draw water from the waterfall but she's a versatile (mouse-fearing) buddy, that's for sure.

▶ Speccy also had a bigger panel so there was less to scroll."

With the Spectrum version also proving to be a sales success, Jonathan was hopeful of designing a sequel. The baton, however, passed to Big Red which led the work on *CJ In The USA*, this time with locations spread around America. CJ needed to rescue his kidnapped siblings while firing peanuts, dropping bombs and collecting food for bonuses as before. The sequel also had a simultaneous two-player option but there were new enemies including police officers, American footballers and even the Ku Klux Klan! "I don't know what happened," Jonathan says. "We wanted to design *CJ In The USA* but were more or less told to copy the Spectrum version. We had brilliant ideas for a sequel but couldn't use them. Our version was a Big Red reskinned game."

Pete was tasked with designing CJ's sequel. "Paul was the dev director at Codemasters and we were handed the baton. And while details are a bit vague, I recall doing the artwork for the game whilst Big Red were in Macclesfield which is when things were ramping up for the developer."

Big Red did a fine job. In Fred's eyes, the sequel was simply a continuation of the first. "There were new locations, new enemies, a 'collect your fellow elephants' thing going on and it was straightforward. Ish.

"I was experimenting with trying to squish more stuff in memory and for this one I had a shot at getting rid of the memory the first game used for its back buffer by rendering the map and sprites direct-to-screen, a scan line at a time. It meant I got some extra memory for other stuff but the game had a similar 'tearing' effect as you get on modern PC games when you don't sync with the monitor framerate."

Pete's graphics were again very detailed. "It was purely based on what could be achieved in two colours," he explains. When creating the

› [Game Gear] Here in Rome, CJ is getting a pizza the action courtesy of an Italian waiter. [Groan - Ed]

"IT WOULD HAVE BEEN A TOUGH SELL ASKING £20 FOR A CART VERSION OF A GAME COSTING £2.99 ON THE SPECTRUM"
Jon Cartwright

visuals for the first CJ game, Pete had tried to give the characters massive expressive eyes and he wanted to continue that with the second game. "I was trying to evoke the chibi-style graphics as seen in *Bubble Bobble*, *Rainbow Islands* and *The New Zealand Story*."

There was no doubting Pete's adoration for the *CJ* series. "It really chimed with my sensibilities at the time: the pure innocence of the character and the juxtaposition of an elephant floating on an umbrella," he says. Jonathan wasn't entirely happy at the outcome, "The levels were unforgiving and, in hindsight, I probably should have told David that I wanted to tweak them but he was under pressure to get the game out," he says.

CJ's next outing arrived in 1994. An exclusive for Sega's Game Gear, it was viewed as a remake of *CJ's Elephant Antics* but coder Jon Cartwright insists, "It wasn't a port. It was a new *CJ* game."

Paul commissioned *CJ: Elephant Fugitive* as part of a drive to make more games for consoles. "As I remember, Codemasters were looking to take games they'd published on home computers and put them on the 'new' consoles," says Jon. Produced by Big Red once again, Pete produced the graphics, Lyndon Sharp composed the music and Jon Cartwright was the coder. Paul gave the game its name because he wanted to tap into the hype surrounding the forthcoming release of the Harrison Ford movie *The Fugitive*.

Pete loved working on the Game Gear version. "Coming from the limitations of the spectrum, the hardware 'restrictions' of the Game Gear was luxury. We also had some really cool character art from the inlays that I tried my best to replicate."

» [Game Gear] *CJ: Elephant Fugitive* was a brightly-coloured affair with great-looking characters.

Great effort went into delivering as much value for money as possible. This time CJ was traipsing across more locations, starting in London. The locations – which also included Paris, the Alps, Rome, Cairo and Jungle – would consist of a few levels rather than just one. Players also had health as well as lives and the game wasn't strictly linear so you find your own way to the exit.

Such additions were deliberate. "It would have been a tough sell asking £20 for a cart version of a game costing £2.99 on the Spectrum," Jon says. Porting the game was also tricky. "The Game Gear could only support a limited number of sprites and I seem to remember that the Spectrum port Fred did could get quite hectic with the number of bombs and enemies on-screen," Jon says. "The Spectrum didn't have hardware sprites either but because the display was bitmapped, smart people like Fred could actually wring a lot out of it in terms of software sprites."

As such, the developers hoped to create a game more suited to the handheld, certainly from a technical perspective. "It's likely we redesigned the levels and enemy patterns to better suit the Game Gear hardware," Jon says. "This allowed us to do nicer coloured sprites and tiles than on the C64 and, of course, we also got to do animated palettes for stuff like water and use the priority of tiles to let CJ walk behind some things and in front of others to give depth to the levels."

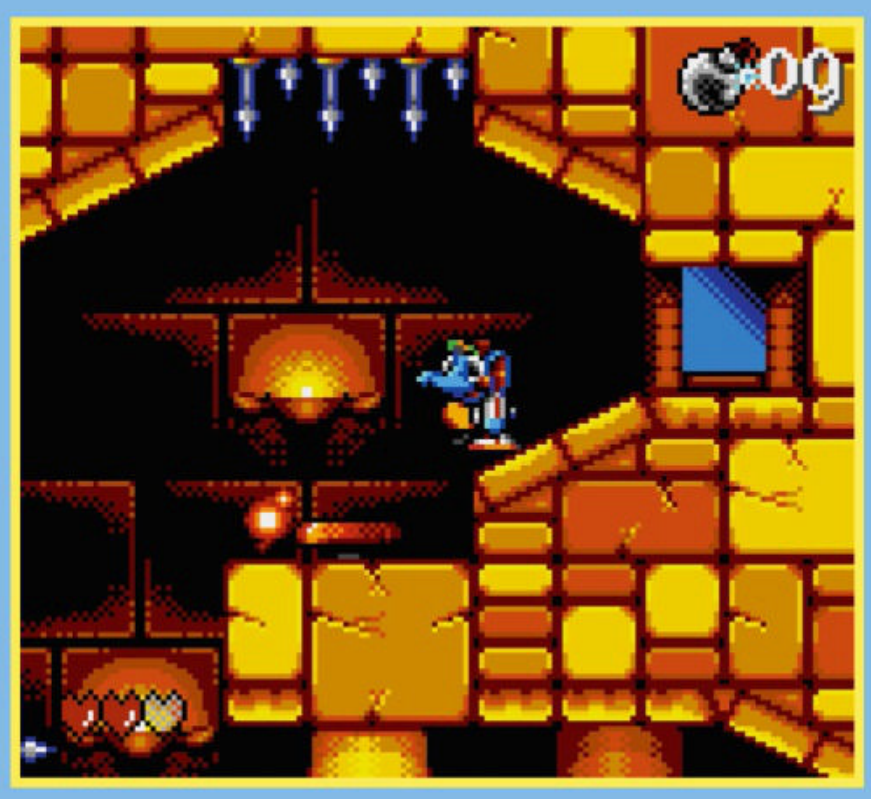
» [Game Gear] Although *CJ: Elephant Fugitive* had two more levels than *CJ's Elephant Antics*, some locations such as Switzerland remained – as did characters such as Heidi.

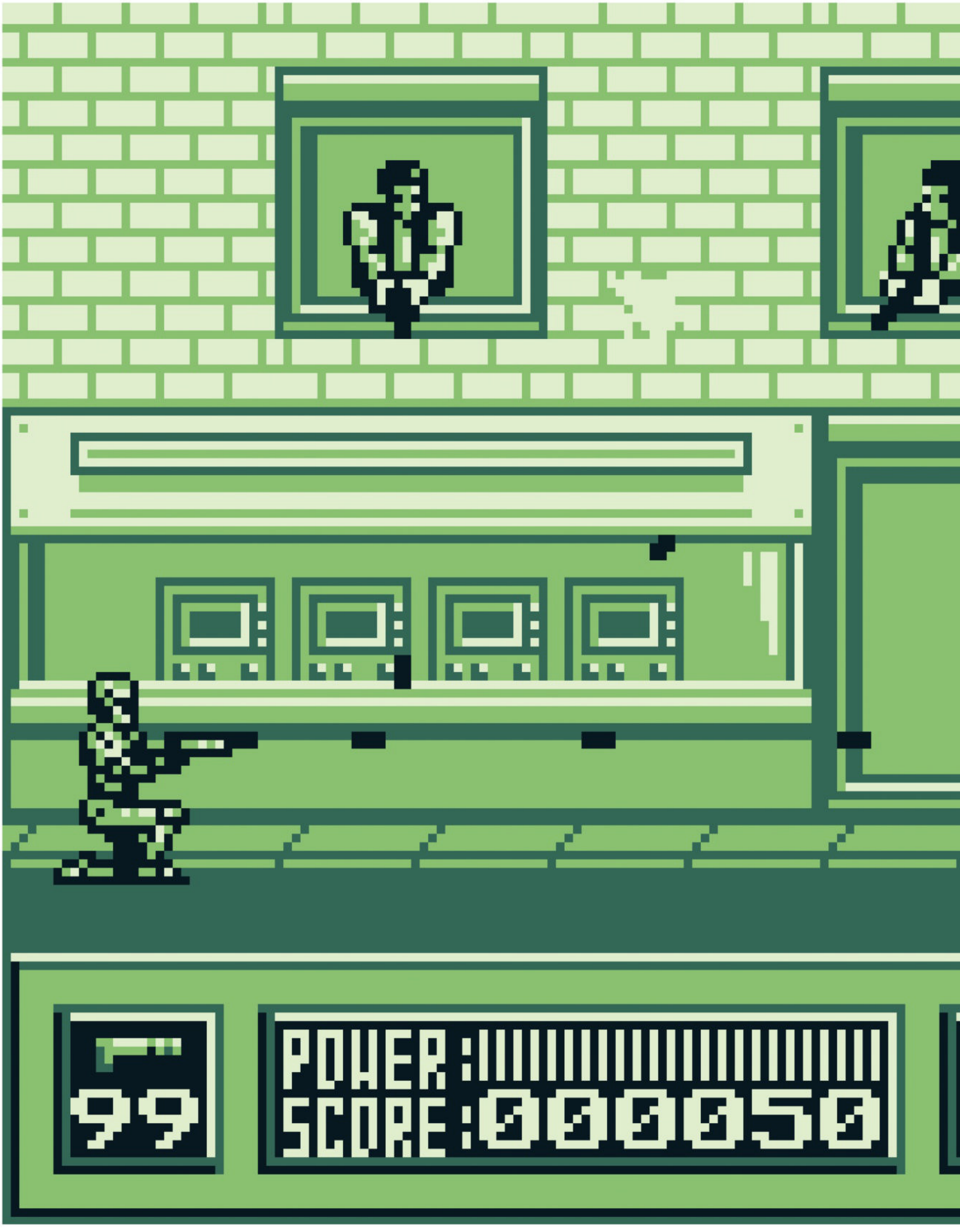
Even so, the game wasn't as well-received as the previous versions. "Looking back, I dare say we could have done more with it," Jon muses. "But bear in mind this was on a proprietary Codemasters cart, developed on a proprietary Codemasters kit and we'd never seen any official documentation. Looking back there were also some interesting challenges in terms of getting the CJ sprite animated. The Game Gear didn't have enough characters for us to have all of CJ's animations in character/video RAM (same as for all of the characters) so I had to upload new animation frames on the fly. It couldn't flip sprites either so if any character turned around we had to upload a different frame."

Sadly, *CJ: Elephant Fugitive* would be CJ's last outing. The transition to console was a crazy time for the company and it had to juggle its resources and prioritise. "Codemasters wanted to cut its teeth on new products but it also wanted to see its games on the shelves and earn a living," Paul explains. "As many know, Codies chose a maverick route to market compared with other less disruptive companies but it meant there was a backlog of products for the consoles with hardly a way for Codies to get to market."

CJ found himself in an awkward mix. "He was often eclipsed by the other characters in the stable because the marketing department favoured them due to historical sales," Paul says. Even so, the formula was successful enough for the ideas to be used with other characters such as Seymour (*Stuntman Seymour*) and DJ Puff (*DJ Puff's Volcanic Capers*). And, just as elephants don't forget, gamers who enjoyed *CJ* will always remember the series for packing so much into its trunk. ★

» [Game Gear] *CJ: Elephant Fugitive* was a redesign of *CJ's Elephant Antics* and it was hard in places: step on the object to CJ's left and the elephant will bounce into the spikes.

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Robocop

REVISIONIST HISTORY

» RETROREVIVAL

» GAME BOY » 1990 » OCEAN OF AMERICA

It's funny how something can pop in your head and you have a strong urge to act on that impulse. While I was watching YouTube videos a link came up for the brilliant intro music for the Game Boy version of *Robocop*. Within minutes I was scouring eBay looking for a cheap copy to play on the Analogue Pocket. I couldn't find it for under £15 so I took a chance on a loose cart at CEX for £9.

I watched a couple of videos in preparation for the game's arrival and the first thing I noticed when my cart did turn up was that its year of release on the title screen was 1991, rather than the 1990 release date I'd seen in videos. It also credited Ocean rather than Ocean Of America. Even weirder was the fact that Robocop himself no longer appeared during the title credits while Jonathan Dunn's excellent tune played (you may recall it from an old Ariston advert).

Anyway, I dropped the cart in the Pocket and I was instantly reminded of how tough it was as enemies are relentless and Robocop's cumbersome gait means it's tricky for him to avoid enemy fire. Still, I knew there was a three-way shot power-up towards the end of the level so I gritted my teeth and got on with it. I soon reached the stage's end but the power-up in question was nowhere to be seen. This led me to believe that I might have a pirate cart so I took to social media to try and get some answers.

Within minutes I was made aware that there were actually two revisions of the game and I clearly had the later revision. I also found the typical embossed numbered stamp found on all legit Game Boy games, so I knew mine was at least real. I quickly reached out to Mike Lamb who coded the Spectrum version of the game as well as this one and while he said revisions were possible, he couldn't remember any for Game Boy *Robocop*.

There are numerous changes I've spotted, though, including a stricter time limit for the opening stage (three minutes compared to four minutes in the original revision). So it appears that someone at Ocean must have felt the game was too easy and wanted the European version to be tougher to complete. But who was that and why is your decision still annoying me 30 years later? If you're out there I'd love to hear from you.

30 YEARS OF THE SUPER SCOPE

THE YEAR 2022 MARKS THE 30TH ANNIVERSARY OF NINTENDO'S SNES LIGHTGUN, THE SUPER SCOPE. CUMBERSOME TO LOOK AT, IT WAS A BOLD EXPERIMENT IN CONTROLLER DESIGN – JOIN US AS WE EXAMINE EACH OF THE 12 KNOWN GAMES WHICH SUPPORTED IT

WORDS BY JOHN SZCZEPANIAK

Have you seen the bit in *Commando* where Arnie preps his gear? Setting up the Super Scope is the same: loading six AA batteries like shotgun shells, clipping the battery lid, slotting the sight assembly, adjusting the viewfinder, sliding the Scope's switch from off to on then to turbo, clicking the infrared receiver into port two, inserting the cartridge, flicking the SNES power, and then – finally – nestling the shoulder mount like Arnie holds his rocket launcher. There were lightguns before and after the Scope, but nothing is as imposing as Nintendo's wireless behemoth, not even Sega's copycat Menacer gun.

By 1992 lightguns were well established, but the Scope afforded greater precision. Nintendo Of America's dev manual said, "The Super Scope detects where the device is aimed, unlike the NES Zapper which detects targets. The instant the CRT electron beam scans across the area seen by the Scope it sends a signal to the SNES which registers the PPU raster counter. With this data the SNES detects the point where the Scope is aimed. Pulse selection determines the vertical location. Horizontal position is determined by the timing of pulses with respect to the horizontal synch signal."

For a simpler explanation we asked Adrian Jackson-Jones, coder on *The Hunt For Red October*, "The mechanic was brilliant. It's really just a lens and a photo sensor. We would narrow in on where it was pointing by flashing the screen until the pointer flashed too. If you could record the video and slow it down you'd see the targeting flashes."

Precision did not equal success. The late Japanese release was limited and there were fewer (12) gun games than on the NES (over 20) and Master System (13). Plus the wireless technology guzzled batteries. We asked *Tin Star* tester Chun Wah Kong how many he used, "Loads!"

Thirty years later it's a fun, accurate bit of kit to play with, but we rinsed the games in a weekend. Batteries added 20% to the eBay cost, plus it needed a CRT. There are mods to run it off mains, and a complex solution to work with HDTVs, but at this point it feels like the sun has set on this exquisite relic.

SUPER SCOPE 6

RELEASE: 1992 ■ **DEVELOPER:** NINTENDO R&D1

This was the pack-in title with the Super Scope. Remember pack-in games? They felt like gifts that sweetened the buying of new hardware. With the promise of six unique games (under the Blastris and LazerBlazer categories) the *Super Scope 6* cartridge probably seemed like a great incentive to invest in the new device. Unfortunately it's more akin to the *Demo One* disc that came with the PlayStation. They're fun, certainly, and a showcase for what the Super Scope can do, but they're not substantial.

BLASTRIS A

Tetris with guns. That odd shape not fitting in? Just shoot it! There's a weird gap you can't reach? Just shoot it! Blocks piling too high? Just shoot them! Although pieces fall rather slowly, this is fun and oddly compelling.

BLASTRIS B

This is not fun. A coloured block slowly descends; shoot the block to rotate it and reveal a different colour. Match colours to make them vanish. You cannot control where the block goes. Imagine the worst clone of *Puyo Puyo* and you're not even close.

MOLE PATROL

You've played whack-a-mole? This is whack-a-mole with guns. You watch the little aliens walk across the top, enter their subterranean home, then you blast them as they pop up. A good example of the speed and accuracy Nintendo's gun affords.

INTERCEPT

Probably the second-best game after *Blastris A*. You need to shoot the missiles before they disappear off the left edge of the screen but, because they're far in the distance, you need to time your shots just right to intercept. Slow, careful precision is needed.

ENGAGE

Fly over a hurtling Mode 7 landscape and shoot enemy ships as they appear. Fast and challenging. The speeding background is more distracting than anything, so if it's causing eyestrain then you should check out…

CONFRONT

This is functionally the same as *Engage*, except without the annoying moving background. You stand motionless and wait as enemies enter your field of vision. It's still quite fast and action-packed though, so aim and fire quickly!

THE HUNT FOR RED OCTOBER

RELEASE: 1993 ■ **DEVELOPER:** RIEDEL SOFTWARE PRODUCTIONS

Although maligned by critics, we really enjoyed *The Hunt For Red October*. It's a bit too difficult without cheats but remains a fun *Defender* clone, with a neat bonus round and final boss that both use the Super Scope. We asked coder Adrian Jackson-Jones about development, "That was a very long time ago!" he says. "The game deserves its reputation. I was in charge and I'd never made a game before. I didn't even know what *The Hunt For Red October* was about." Needless to say, Adrian's game isn't very authentic. "I just wanted to make something fun. It's funny, small groups of noobs who make silly games get respect now. But for some reason the expectation was different then. I mean squids are dumb. They aren't in the book or film. They don't eat submarines. But as a young person I thought squids were the coolest, so I added them". Adrian also remembers its difficulty. "The game is too hard," he admits. "For some reason we had to make it take a long time for Nintendo to play through. This is the breakout I would make for *The Hunt For Red October*: you may not like it, but as a kid, if you could make *Defender* with squids, wouldn't you do it too?"

T2: THE ARCADE GAME

RELEASE: 1993 ■ **DEVELOPER:** MIDWAY / PROBE SOFTWARE

At the time one of the best *Terminator* games – most others were bad. Early levels lead up to the film's events, followed by key scenes from the film. It's originally an arcade game that was converted to SNES and Mega Drive and various home computers. With pad, mouse, *and* gun support, we feel the SNES version wins out. The sight can't be calibrated and is misaligned, but since you use a machine gun free-aiming works well. Be warned, the gun forces a *much* brighter colour palette!

Coder Justin Garvanovic describes porting the popular arcade game. "I have all my old source code. Sadly I don't have the original arcade stuff – they just sent the graphics. If you're using the gun it forces a new palette to make it see-able. Nintendo always wanted to make sure you could swap controllers mid-game, so 'new controller attached – is it a gun? – yes – swap to new palette'. The better gun games had to be designed for it from the start." Did Justin remember anything else? "I remember a Western shooter that looked OK, although again, the colours were pretty bright. After *T2*, I started on a *D&D* game for SNES, with rotoscoped graphics, think *Castlevania*, for Hudson Soft. But the PS1 was on the horizon so it was canned."

Thanks to Ken Horowitz of Sega-16.com for supplying the Menacer.

(NOT) ALL THE GUNS!

There exist more lightguns than you realise!

Lightgun entertainment dates to before World War II, with galleries of light-sensor targets and guns that shot light-beams. There's an anecdote in David Sheff's *Game Over* on how in the early Seventies Gunpei Yokoi of Nintendo adapted solar-cell technology to create cheap lightgun toys for home use.

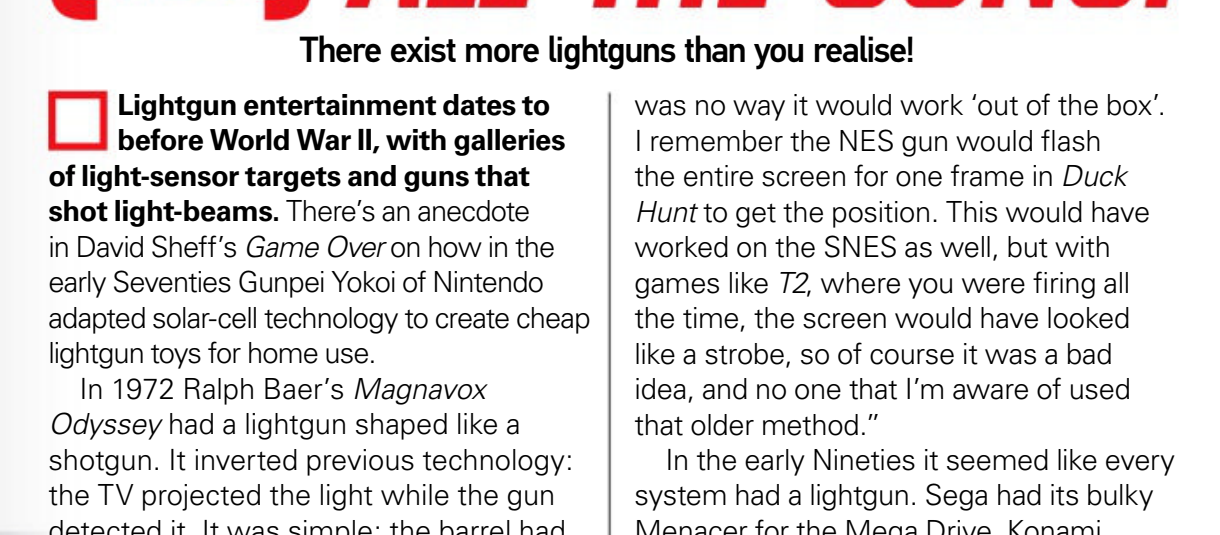
In 1972 Ralph Baer's *Magnavox Odyssey* had a lightgun shaped like a shotgun. It inverted previous technology: the TV projected the light while the gun detected it. It was simple: the barrel had a light-sensitive diode that detected if it was aligned with a white square on the TV, thus registering a hit.

Technology evolved quickly with subsequent generations. The NES and Master System guns were more sophisticated, though still functioned by sensing light. When the trigger on the NES Zapper was pulled the screen would go black and then white squares representing targets would flash up for the gun to detect.

The SNES took things further. Justin Garvanovic, programmer on *T2: The Arcade Game* for SNES, explained the improvements of 16-bit. As he described it, the Super Scope was more precise, albeit with certain restrictions. "The biggest problem was it only saw certain colours, and with *T2* being so dark, there was no way it would work 'out of the box'. I remember the NES gun would flash the entire screen for one frame in *Duck Hunt* to get the position. This would have worked on the SNES as well, but with games like *T2*, where you were firing all the time, the screen would have looked like a strobe, so of course it was a bad idea, and no one that I'm aware of used that older method."

In the early Nineties it seemed like every system had a lightgun. Sega had its bulky Menacer for the Mega Drive. Konami released its arcade-born Justifier, shaped like a revolver, for both 16-bit consoles. Even the 3DO and Philips CDi received guns. The 32-bit era brought more guns, with Sega's model for the Saturn, and numerous competing third-party models on the PlayStation – though you just needed the official Namco and Konami guns to play all compatible games.

Later were lightguns for Dreamcast, PS2, and Xbox. Nintendo skipped two hardware generations – the N64 and GameCube – before creating the Wii Zapper. This was just a gun-shaped frame the Wii Remote could sit in. It functioned using a sensor-bar, not light detection. Of course by this time TV technology had started to move beyond CRT into HD LCD, which was not compatible with traditional lightguns.

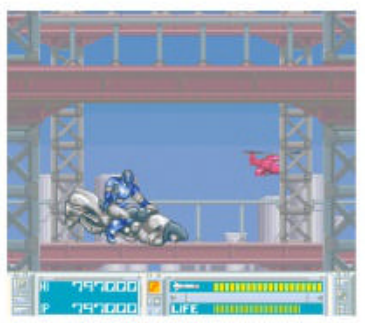


images by Evan Amos

BATTLE CLASH

RELEASE: 1992 ■ **DEVELOPER:** INTELLIGENT SYSTEMS

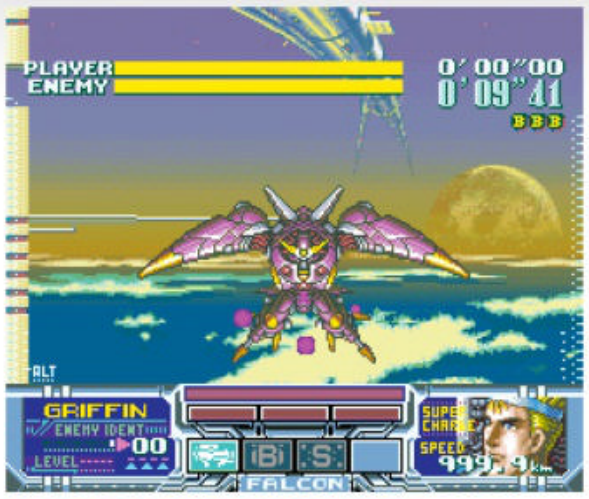
Ask any Super Scope owner and they'll probably recall the pack-in cartridge and this one-on-one mecha battler. It's a great showcase for the Super Scope. As the gunner in a Standing Tank you need to take aim at rival combatants while your AI-controlled co-pilot manoeuvres. Each battle is preceded by dialogue with character portraits, and the whole thing feels polished. Rapid blasting can take down projectiles, while charged shots will damage enemies. You can aim at weak points to win, but it's more fun to pick off their arms and legs slowly. Don't be put off by claims of how much better the sequel is. *Metal Combat* is indeed superior, but this is still fantastic in its own right.



BAZOOKA BLITZKRIEG

RELEASE: 1992 ■ **DEVELOPER:** TOSE

Of the initial Super Scope releases in 1992 this was the weakest. It's not a bad game, it's infinitely better than the later released *Operation Thunderbolt*, but it's very workmanlike. It's a scrolling gallery shooter; sometimes vertically and sometimes horizontally. You have a standard rapid-fire machine gun and a supply of missiles for the tougher enemies. There's only a small number of palette swapped foes though, and the game recycles them heavily throughout. The bosses are all distinct, but can get very challenging towards the end. The game also annoyingly pulls a *Contra III*, in that to see the full game you need to play on the highest difficulty.



METAL COMBAT: FALCON'S REVENGE

RELEASE: 1993 ■ **DEVELOPER:** INTELLIGENT SYSTEMS

The sequel to *Battle Clash* and one of the absolute best games on the SNES – not that anyone would know, since it can only be played with a Super Scope. Its high quality is unsurprising given the involvement of developers such as Toshitaka Muramatsu, who also worked on the *Fire Emblem* and *Paper Mario* series. It follows the same formula as *Battle Clash*, but pumps everything up: charge shots can now be triple-charged, attack cancellations are more important, there's new selectable power-ups, the plot is expanded and you even fight in outer space! It's a shame so few will experience this forgotten gem on real hardware, given that modern TVs no longer work with the Super Scope.

OPERATION THUNDERBOLT

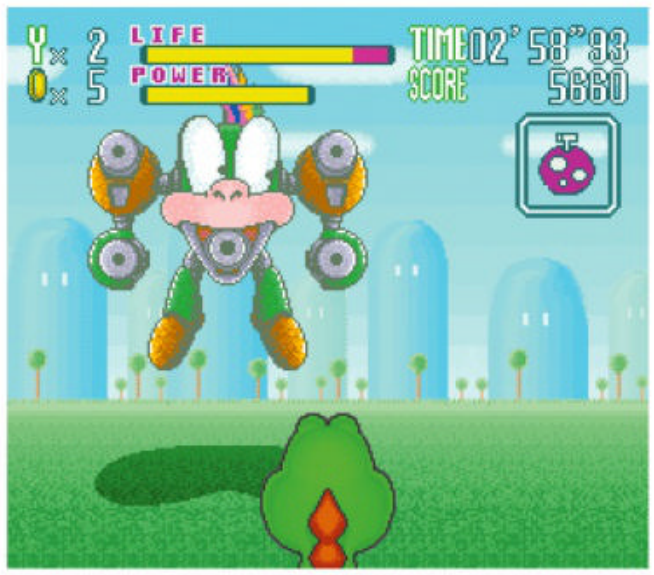
RELEASE: 1994 ■ **DEVELOPER:** TAITO/AISYSTEM TOKYO

An unmitigated train wreck and contender not just for the worst arcade port to the SNES, but one of the all-time worst SNES games released. Not because of problems with the Super Scope, which is very accurate, but because of its performance. While it looks alright in screens, on original hardware it runs at what seems to be about 5fps. We're not saying this to be funny or edgy, we genuinely mean the game is a jerky unplayable travesty. Amstrad CPC ports run smoother than this. [Ouch! - Ed]

X-ZONE

RELEASE: 1992 ■ **DEVELOPER:** KEMCO

Part of the first lot of 1992 releases, it's an impressive early effort! It's probably the fastest and toughest of the Super Scope games (we only barely reached the end). It's so fast, *X-Zone* could only really work with a lightgun – you need to be blasting all over the screen at speed. It mixes in a variety of play styles too, starting with an aerial descent, followed by horizontal scrolling stages and first-person rail stages. It's a little simple given the lack of secondary fire, but you'll be so busy taking down enemies you won't notice. Be warned: you cannot calibrate the gun and the aim is misaligned from the aiming reticule, so remove the sight assembly when playing.



YOSHI'S SAFARI

RELEASE: 1993 ■ **DEVELOPER:** TOSE

It's a real shame this on-rails shooter came out the year after the Super Scope's release, because it would have made the perfect pack-in title. Even though it's incredibly easy, and you'll finish it on your first sitting, *Yoshi's Safari* is bright, colourful, warm and full of fun. The first seven levels can be tackled in any order so you can just jump into your favourite for a quick blast rather than going through all of them. What makes it so wonderful is that, for the time, it offered an unprecedented first-person view into Mario's world. You get to see all your favourite characters from previous games, through Mario's own eyes, and then you get to shoot them in the face.

LEMMINGS 2: THE TRIBES

RELEASE: 1994 ■ **DEVELOPER:** DMA DESIGN

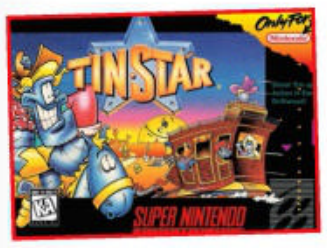
Seemingly unknown for roughly 20 years, until George Rowe and Dan Efergan contacted *Lemmings* creator Mike Dailly, revealing it at Playful 2014. It's just an Easter Egg; the crosshair can't be calibrated and can't reach the top of the screen. At the 2019 GDC Mike Dailly explained, "Another thing I did. Yeah. [laughs] I did mention I was bored, didn't I? So I borrowed the Super Scope from Russell Kay's company, because I just came up with this wacky idea and I thought, you know, why not? So if you plug a Super Scope into the second port, you can aim and shoot the Lemmings. Just for the hell of it. They just blow up, there's no real point to it. But it's so satisfying."

LAMBORGHINI: AMERICAN CHALLENGE

RELEASE: 1993 ■ **DEVELOPER:** TITUS FRANCE

One of the designers was Eric Caen, who also brought us *Superman 64*. Yet this is not terrible. Certainly you need to respect the ambition (madness?) of trying to force both lightgun and mouse controls into a racing game! If the Super Scope is plugged in it loads into a bespoke mode where aiming steers the car, while shooting both accelerates it and fires a machine gun (allowing you to destroy rivals). It plays a little bit like *Chase HQ*. There's only a few tracks which repeat and all trackside scenery of the main mode is missing.

THE MAKING OF TIN STAR



IN THE KNOW

- **PUBLISHER:** NINTENDO
- **DEVELOPER:** SOFTWARE CREATIONS
- **RELEASED:** NOV/DEC 1994
- **PLATFORM:** SNES
- **GENRE:** GALLERY SHOOTER

» John Buckley programmed *Tin Star* and describes it as his "farewell" project.

WE'VE SAVED THE FINAL SUPER SCOPE GAME FOR LAST. RELEASED AROUND THE SAME TIME AS THE SATURN AND PLAYSTATION IN JAPAN, THIS BRIGHT AND INVENTIVE LIGHTGUN SHOOTER MARKED THE TRANSITIONAL PERIOD TO 32-BIT CONSOLES. THOUGH SET IN THE WILD WEST, IT WAS DISTINCTLY BRITISH

Released at the end of 1994 *Tin Star* marks the last of the Super Scope releases (*Operation Thunderbolt* was the penultimate release just prior). It was also the last of only five games to make use of the SNES controller and mouse, in addition to the Super Scope (see boxout). With the gun having come out in 1992, *Tin Star*'s programmer John Buckley was well aware of it before the project began. "I first came across the Super Scope while still working on *Plok*," he recalls. "My first thought was that it was like a sledgehammer to crack a nut! The general consensus among the programmers was to stay well away. I was lucky as I had experience of lightguns from a project I had done previously called *Cops*, a LaserDisc arcade game. I worked in the arcade industry for these guys in the early Eighties before entering the computer and console market, so this helped to get up to speed when the Super Scope project was given to me."

Game tester Chun Wah Kong recalls the start of development, "Prior to *Tin Star*, I never owned a lightgun or played any lightgun games extensively. I thought it was very big and American," he says. "We had a great working relationship with Nintendo Of America having just finished *Ken Griffey Jr Presents Major League Baseball* for them on the SNES, so *Tin Star* was building upon that partnership."

However, although the result of good working relations, there was some apologetic background politicking to its green light. Ste Pickford on Zee-3.com revealed, "*Tin Star* [was] the SNES lightgun game we did for Nintendo in 1994, a contract they gave us as some kind of compensation for not giving us the follow-up to *Ken Griffey* – that went to Rare – despite us doing a brilliant job on the first *Ken Griffey* game."

» [SNES] Though this looks like a typical SNES platformer, the sheriff actually moves of his own accord – you just shoot.

Tin Star combines precise lightgun blasting with highly detailed visuals, abundant animation, and a hilariously original comedy scenario involving robots in the Wild West. "I used my *Plok* system and incorporated the Super Scope system within it," explains John, describing how the project built upon previous SNES experience. "Then just experimenting to see just what we could achieve with graphics intensity and accuracy. Malcolm McGookin came up with the whole storyboard for it and this was used for the basis of the game."

It's important to reflect on this storyboarding. The game is divided into a week-long series of vignettes in the life of the eponymous sheriff as he attempts to rid East Driftwood of outlaws. Each day comprises a series of cutscenes and gallery shooter minigames: target practice, horizontal FPS, quick-draw showdown, third-person horse riding and third-person auto-platforming. It's these last two, especially the auto-platforming, which stand out.

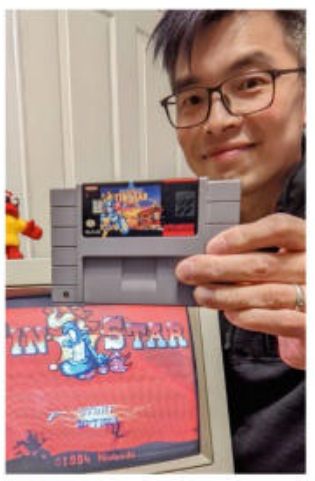
» [SNES] These two screens highlight the difference in colour palette between the controller and Super Scope modes.

DEVELOPER HIGHLIGHTS

SOLSTICE
SYSTEM: NES
YEAR: 1990

PLOK (PICTURED)
SYSTEM: SNES
YEAR: 1993

KEN GRIFFEY JR PRESENTS MAJOR LEAGUE
SYSTEM: SNES
YEAR: 1994



» Chun Wah Kong helped ensure *Tin Star*'s quality and still has his original copy.

» [SNES] This reminded us a lot of the horse-riding sections in *Wanted!* on Master System. This obviously looks far better!

» [SNES] In the jailbreak level focus your attention on enemies on the jail roof, otherwise it's game over.

» [SNES] Although simple in execution, these quick-draw duels are immensely fun when using a Super Scope.

While screenshots resemble *Wild Guns* on SNES, the functionality is closer to *Wanted!* - a 1989 lightgun game for the Master System. In this the player's avatar is *seen* but moves *on its own*, while the player shoots directly at enemies. With *Tin Star*, however, the animation of the autonomous avatar and enemies is so smooth and detailed, it's more akin to interacting with a cartoon or FMV title.

"Phil Bretherton was my technical artist and we managed to get what we wanted from the game," says John, when asked about this level of detail. "There were a few animators working on the project who were more at home drawing on paper, so Phil used to guide them through things."

Along with making best use of SNES graphics it also supported three distinct peripherals. "With new hardware there were additional Technical Requirement Checklists in order to pass the Nintendo submission process," recalls Kong, who had to test the game using all three. "With the Super Scope and the mouse, the speed of the cursor obviously moved very quickly. So extra attention had to be paid to the joypad version to ensure the game was still playable – considerable tweaking was involved on that." He also hinted that maybe the Software Creations office was a little noisier than usual, "You can't help but make explosive noises when you have it held like a rocket launcher over your shoulder!" John elaborated on the choice to use all available devices, "It was decided quite early that a game solely for the Super Scope would be limiting, so we incorporated the mouse and controller. The mouse and Scope were straightforward but it was a bit more fiddly trying to get the cursor to move with the controller and still *feel* OK. I mainly used the controller as I programmed because this was more limiting, so if I got it to work then the mouse and Scope would be fine."

"*Tin Star* probably had the fewest bugs in any game I've ever tested because of the linear nature of its design and John's an incredible coder," continues Kong. "Time was dedicated to plugging and unplugging the peripherals repeatedly compared to a standard joypad game."

But if it's to hold the title of 'Last Ever Super Scope Game', when did it actually come out? "I have no idea," admits John, "I left prior to September 1994. I was offered a position elsewhere, but I didn't want to leave people in the lurch, so *Tin Star* became my 'farewell' project."

"I'll check the magazines I kept," says Kong. Minutes later, "*Nintendo Power* issue 67 says it was December 1994."

Online sites cite November, but whether it was November or December, as a swan song for the Super Scope it was a fine send off. Using the Scope feels fantastic, especially for the quick-draws, but even with the mouse or controller *Tin Star* is another game by Software Creations that should have garnered more attention.

A VERSATILE MOUSE

HOW NINTENDO'S PERIPHERAL ENHANCED NUMEROUS GAMES

The origins of the mouse date back to the Sixties and the work of Douglas Engelbart and Bill English. The mouse is one of the most intuitive means of digital control available, and so it's understandable Nintendo would create one for its Super Famicom alongside art package *Mario Paint*, which was released in 1992.

By our count there were over 70 compatible titles, mostly cursor games such as *Cannon Fodder*, but also FPSes like *Wolfenstein 3D*, and shooters such as *Revolution X*. What's interesting is the overlap with Super Scope compatibility. Prior to *Tin Star* there were four other games that supported both the mouse *and* Super Scope: *Lamborghini: American Challenge*, *Lemmings 2: The Tribes*, *Operation Thunderbolt* and *T2: The Arcade Game*.

Justin Garvanovic, SNES programmer on *T2* at Probe in Croydon, recalls the challenge the team faced making it work with three different input methods, "Team? It was just me, no teams back then," he says. "*T2* had mouse support as well and it was the best way to play it. Apart from it needing to be tested with the pad, gun, and mouse… the testers loved me! The Scope was a standard retail one. Same for the mouse – we bought the art package for that. There was some software from Nintendo for getting data from it, and some rules about the aiming system."

images by Evan Amos

Master System II

» **MANUFACTURER:** Sega » **YEAR:** 1990
» **COST:** £59.99 (launch), £50+ (today, boxed), £20+ (today, unboxed)

It is inevitable that any sufficiently long-lived console will see the benefit of technological advances. Even if the performance of the machine is unchanged, components can be combined, circuit boards can be shrunk and unpopular features can be dropped. This makes machines cheaper to manufacture and often cheaper to buy, and if the internal redesign is radical enough, the external design can change too. That's the case with the Master System II, which was introduced to Sega's non-Japanese customers after the arrival of the Mega Drive.

The Master System II had minor technical differences to its predecessor, mostly in the video display processor, and contained either *Alex Kidd In Miracle World* or *Sonic The Hedgehog* as a built-in game. Sega removed a number of the original model's lesser-used features, most notably the card slot, meaning that the system could only play cartridges and did not support the 3D glasses accessory. Other omissions include the reset button and the expansion port, as well as the port for composite and RGB video output. This is the most consequential change for gamers today, as analogue RF video is not supported by most modern TVs, nor any upscaling devices. ✱

Master System II fact

■ Though most Master System II units require modification to output RGB video, units sold in France output over RGB SCART natively, and don't use the same PCBs as regular PAL consoles.

PROCESSOR: Z80 8-BIT CPU (3.58 MHZ)
MEMORY: 8KB MAIN MEMORY, 16KB GRAPHICS MEMORY
GRAPHICS: CUSTOM SEGA VDP, 256X192 DISPLAY, UP TO 32 COLOURS ON SCREEN (FROM 64 PALETTE), 64 SPRITES PER FRAME
AUDIO: SN76496 PSG SOUND CHIP, 3X SQUARE WAVE CHANNELS, 1X NOISE CHANNEL
MEDIA: ROM CARTRIDGE (UP TO 8 MEGABIT)

Image by Evan Amos

Image by Evan Amos

ESSENTIAL GAME

Wonder Boy III: The Dragon's Trap

This brilliant platform adventure starts off right where *Wonder Boy In Monster Land* finishes, only to reveal that our hero is cursed after defeating the dragon. Now he is condemned to wander the world as a lizard man, searching for a way to regain his humanity, and that's where you come in. Your goal is to seek out and defeat dragons to obtain new animal forms, each of which has special abilities that allow you to explore more of the world. Yes, it's a Metroidvania. While they're pretty common today, this felt unique at the time and holds up beautifully.

THE HISTORY OF AFTER BURNER

IT WAS RELEASED 35 YEARS AGO, YET AFTER BURNER STILL IMPRESSES TO THIS DAY THANKS TO SEGA'S GROUNDBREAKING TECH AND YU SUZUKI'S GOLDEN TOUCH. JOIN US AS WE RIDE INTO THE DANGER ZONE TO CHART THE HISTORY OF THIS AIRBORNE OPUS

Word By Martyn 'Mayday' Carroll

Sega's Yu Suzuki often cites English-language movies as inspirations for his arcade hits. *Space Harrier*, we've learnt, was partly influenced by *The NeverEnding Story*, while *Out Run* was based on *The Cannonball Run*, of all things. His main inspiration for *After Burner* was far more obvious. *Top Gun* was released in 1986 and quickly became a worldwide hit and cultural phenomenon, so when Suzuki was deciding what to do next after the release of *Out Run*, he opted for an arcade game involving supersonic F-14 fighter jets. He felt the need for speed basically.

Yet this wasn't the first time he'd mulled over the concept. As revealed in **Retro Gamer** 145, when he joined the *Space Harrier* team, the game was simply known as *Harrier* and the player controlled a Harrier Jump Jet. Suzuki felt that to depict the jet from multiple angles would take up too much time, and crucially eat up too much memory, so he decided to use a human character in a fantasy setting instead. Although Sega's Super Scaler technology was ahead of its time, Suzuki constantly demanded more performance to realise his concepts. *After Burner* would be the first title to utilise Sega's next-generation X Board which effectively doubled the capabilities of the original *Space Harrier* hardware.

The three CPU set-up (two 68000s and a Z80) was the same, but both the program memory and graphics memory were doubled to 1MB and 2MB respectively – enough to finally make the jet sprite a reality. The graphics chipset was also bolstered to enable twice as many sprites (256) to be displayed on-screen and increase the framerate from 30 to 60fps. This meant that the air combat would be full-on and blisteringly fast. But that was not all. The sprite and background layers could now be fully rotated through 360-degrees – hello barrel roll! In another nod to *Top Gun*, the game's composer Hiroshi Kawaguchi has revealed that improved sound specs allowed him to synthesise the guitars required for the rock-themed soundtrack.

Key to Suzuki's success was marrying blockbuster games with show-stopping 'simulators' and he wasn't about to disappoint with *After Burner*. The deluxe sit-down cabinet was based on a jet cockpit and featured a flight stick, 20-inch monitor and four 10W speakers. Two motors provided the motion – one pitched the cab back and forth, the other rolled the seat left and right. Together they provided a physical experience that eclipsed anything else in the arcades at that time.

"I FOUND A YOUTUBE VIDEO TITLED 'SHIT GAME TIME, AFTER BURNER (EUROPE) AMIGA'. CAN'T SAY I WOULD DISAGREE WITH THAT"
RICK CLUCAS

Although the X Board hardware was transformative, and the deluxe cab was a 950lb monster, the gameplay was a more modest update of *Space Harrier*. Your jet was armed with two weapons – a cannon for shooting nearby enemies and missiles for taking down more distant targets once you'd locked onto them. Sometimes you would be perused by an enemy jet or heat-seeking missile and you had to perform barrel rolls to shake them. Despite the game's title, there was no way of increasing your speed by firing the afterburners – initially at least. The game launched in Japan in July 1987 with no throttle control and it was quickly determined that this made the game too difficult and negatively impacted on the gameplay in other ways. So three months after its debut, Sega unveiled an upgraded version that introduced a throttle lever alongside the ability to fire off missiles faster. The stage order was also shuffled and the total number of stages was increased from 19 to 23. Two of the new stages were

» Rick Clucas oversaw the Atari ST and Amiga conversions for Argonaut on behalf of Activision.

MEMORABLE CAMEOS

AFTER BURNER HAS POPPED UP IN NUMEROUS PLACES...

■ The legacy of *After Burner* has extended to a number of games and films. In Yu Suzuki's *Power Drift* (1988), the F-14 can be played in a secret stage unlocked by finishing first in five races. The jet also makes a fleeting appearance in *Fighters Megamix* (1996) at the beginning of BM's stage (if you hold down the X button on both controllers). Easily the game's most memorable appearance is in *Shenmue 2* (2001), where the coin-op itself is one of four Yu Suzuki games that Ryo can while away the time playing. Moving on, the 'Sega Enterprise' aircraft carrier appears as both a court in *Sega Superstars Tennis* (2008) and a race track in *Sonic & All-Stars Racing Transformed* (2012). In the latter there's also a character called AGES who transforms into the F-14 when in flight.

In the movie world, the coin-op appears briefly in *By Dawn's Early Light* (1990) and *Suburban Commando* (1991). However its place in pop culture was secured when it featured in *Terminator 2: Judgement Day* (1991). Early in the film young John Connor is seen rocking and rolling in a deluxe *After Burner* cabinet while the evil T-1000 searches for him. Later, dickwad!

» [Arcade] Piloting the *After Burner* F-14 around a track in *Power Drift* is surely peak Suzuki.

» When he's not hacking ATMs and blasting Guns N' Roses, John Connor puts *After Burner* through its paces.

» [Arcade] The image of the F-14 ready for takeoff is almost as iconic as the Ferrari Testarossa on the start line in *Out Run*. Almost.

» [Arcade] The visual flourishes are sometimes subtle. Note how the setting sun is reflecting on the jet's underside.

FIRE & FORGET

BECOME A TOP GUN WITH THESE ESSENTIAL TIPS

TRIGGER HAPPY

■ Your Vulcan cannon is equipped with unlimited ammo so don't be conservative. Hold down the trigger while you play and you'll pick off both enemies coming from behind and approaching enemies who've evaded your missiles.

MOVING TARGET

■ It may sound obvious, but many players try to play it cool by staying still and only reacting to avoid missiles. It's much better to keep moving, using the whole of the screen area, while keeping a close eye on enemies on the horizon.

SMOKED OUT

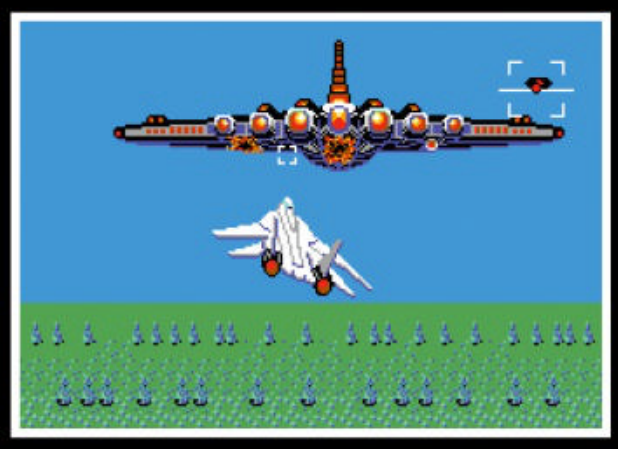
■ There's a temptation to fire off a barrage of missiles in the hope that they connect. However, the smoke trails on missiles are quite large, and if you launch too many, you won't be able to see a thing through the smoke. Not good.

FIRE AT WILL

■ The Lock-On light is useful for knowing when you've got an enemy in your sights, but even better is the "Fire!" audio cue. As soon as you hear that magic word, instantly fire off a missile and you're guaranteed to land a direct hit.

SPEED CONTROL

■ The throttle is not just for firing your afterburners. Use it to slow down when you're being tailed by an enemy plane and they'll often fly right past you, allowing you to turn the tables on them. Slow down during the canyon runs too.



OFFING GRANTANOFF!

■ This tip is specially for the Master System version. To destroy the large flying fortress you encounter on stages 6, 12 and 18, you need to shoot the three targets beneath its wings with your missiles; your cannon has zero effect.

automated runway sequences (that included neat cameos from the *Hang-On* bike and *Out Run* car), while the other two were playable and designed to add variety to the landscapes.

The upgraded game was titled *After Burner II* (*After Burner 1.1* might have been more accurate) and it was this version that was released in the West in late 1987. The visuals and overall playing experience were widely praised, but a number of critics cast doubts on the gameplay. Rather like its inspiration, *Top Gun*, it was a fast and flashy audience pleaser, but was there enough substance beneath its glossy veneer? This is perhaps why the game isn't as lauded as some of Suzuki's other hits from this era. It probably didn't help that in the UK it cost as much as £1 to have a spin in the deluxe cab. Regardless, it instantly became the top grossing arcade game when it was launched in the UK and it achieved similar earnings success in Japan and North America.

As with *Out Run* before it, there was a clamour for home conversions and they would duly arrive. First to appear was Sega's own Master System version which was somewhat unique, being based on the original Japanese coin-op (so no throttle control) and introducing its own unique elements (including boss fights against a large flying fortress and a refuelling minigame). Meanwhile, the rights to the home computer versions were secured by Activision UK which reportedly spent in the region of £100-250k for the privilege (it was almost certainly closer to the top end of that estimate). Multiple platforms were targeted

» Steve Clark was lead programmer of *Sega Arcade Gallery*, the 2003 GBA compilation that featured *After Burner*.

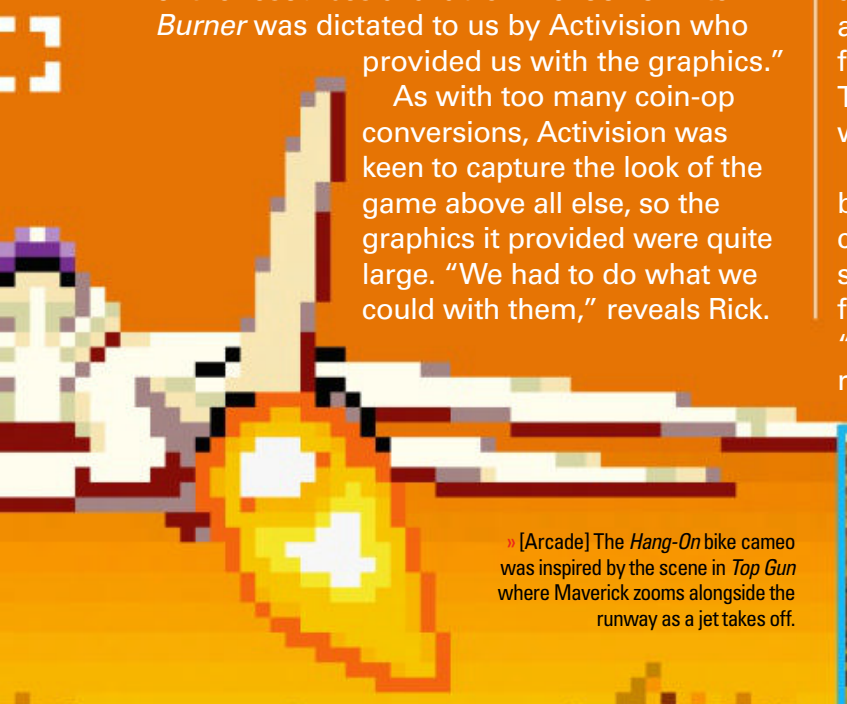
» [Arcade] You can evade heat-seeking missiles by either barrel rolling or hitting those afterburners.

» [Arcade] *After Burner II* added four new stages, including this memorable one that takes place over cloud cover.

and Activision commissioned internal and external teams to handle the work. For the 16-bit computer versions it turned to *Starglider* developer Argonaut Software.

"We were responsible for the Atari and Amiga versions," says Rick Clucas who managed the project for Argonaut. "To us they were the same thing as we developed them as one. For *Starglider II* I had created a system that allowed both the ST and the Amiga to run the same executable. We effectively created device drivers for all of the functions we cared about – graphics, sound and input/output – so that we could maximise the performance on each of the platforms, making the best use of the resources available. The look of *After Burner* was dictated to us by Activision who provided us with the graphics."

As with too many coin-op conversions, Activision was keen to capture the look of the game above all else, so the graphics it provided were quite large. "We had to do what we could with them," reveals Rick.



» [Arcade] The *Hang-On* bike cameo was inspired by the scene in *Top Gun* where Maverick zooms alongside the runway as a jet takes off.

"I think the biggest problem with the large graphics was storage space as the game had to fit on a single disk. Image compression didn't really exist then, or at least we weren't using it on textures."

To get a feel for the game, the team was able to get hands-on with the coin-op, albeit briefly. "We got to spend a weekend at an arcade that had one and that was it. I liked the sit-in coin-op as it made it more of an experience, which is what the arcade was all about." The one area where Argonaut's versions actually expands on the coin-op is in the amount of speech used, with phrases like "Enemy! Three o'clock!" heard throughout. "We did this because we could," says Rick. "I had created a sample playback system for the original *Starglider* on the Atari ST and the speech was one of those things we were known for. People still talk about it today as being one of their childhood memories."

Looking back, *After Burner* is not a project Rick remembers with fondness. "I should have insisted that we do our own graphics as they would have looked much better. There were also tight timescales that created pressure to get it done. But it was all a very long time ago. These days I sometimes use the game as one of my Zoom backgrounds – I found the footage on a YouTube video titled 'Shit Game Time, After Burner (Europe) Amiga'. Can't say I would disagree with that."

That video's reference to 'Europe' is because there was a different Amiga conversion released in North America. The same thing happened on the Commodore 64, for reasons well-known to Darrin Stubbington. "Ah yes, *After Burner*..." he says with some reluctance. "At the time I was working in California for a company called IDG doing PAL to NTSC conversions of C64 games. This involved reprogramming the UK games to work in the US and converting them to a turbo-load disk format instead of tape. On certain games I added or changed graphics too. Well, the UK version of *After Burner* was such a poor version that we decided – both IDG and Sega – to recreate the entire game from scratch instead of doing the usual NTSC conversion. My roommate, Scott Blum, and I created the new US version with me on design and graphics duty, and Scott programming it." The Amiga version didn't pass muster either. "At the same time, my friend Jeff Spangenberg and my brother Matt did almost all of the Amiga version of *After Burner*, again for the same reason as the C64 rewrite – the PAL version was terrible! I created a few bits and pieces for the Amiga version, including the loading screen, but that was about it."

"THE GBA WAS POWERFUL BUT EVEN IN ASSEMBLER IT WAS NOT ABLE TO FULLY DUPLICATE SEGA'S SUPER SCALER TECHNOLOGY"
STEVE CLARK

Returning to the arcades, Suzuki has revealed that he only managed to achieve 60% of what he wanted to in *After Burner*. In particular he was keen to feature dogfights with the player battling it out against a select few enemies. He fulfilled this aim in his next air combat game, *G-LOC: Air Battle*, which was released in 1990. Compared to *After Burner*, *G-LOC* had more of a simulator feel with the action mainly viewed from the pilot's POV. This is why *G-LOC* was not billed as an *After Burner* game – although a more arcade-orientated update of *G-LOC* entitled *Strike Fighter* (1991) was later released for the Sega Mega-CD and FM Towns as *After Burner III*.

» [Arcade] In the original Japanese version, the missiles drop from the jet before launching, which slows down your attacks. This was removed in the update.

There was excitement in the Sega world when *After Burner III* was unveiled as a Mega-CD exclusive, meaning that Mega Drive owners would have to make do with the so-so conversions of *After Burner II* and *G-LOC*. This quickly dissipated when it was discovered that the new game was a flaccid shooter that wasn't deserving of the *After Burner* name (blame marketing, folks).

Thankfully better news was coming on the *After Burner II* conversion front. The version for Sega's 32X add-on, released in 1995, was the first to match the visual quality of the arcade game, although it ran at half the framerate. The following year's Saturn conversion matched the coin-op's 60fps and we finally had an arcade perfect conversion. The home hardware had finally caught up with the coin-op, which was great news – unless you happened to be the man tasked with converting it to the Game Boy Advance.

In 2002, programmer Steve Clark was working at UK developer Bits when his boss Foo Katan revealed that three Sega licences were up for grabs. "He was planning to go for one of them and wanted to know which would be the preferred option," Steve remembers. "The licences were *Shinobi*, another game which I can't remember off-hand, and a four-pack of *After Burner*, *Out Run*, *Space Harrier* and *Super Hang-On*. Given that *Out Run* was my all-time favourite arcade game, I suggested the four-pack option. Foo was far keener on one of the single game options."

Foo was ultimately won over by Steve's enthusiasm and they started work on what would become *Sega Arcade Gallery*. "There was no way to match the experience of the cabinet's motion," says Steve, "but the display and gameplay could be reproduced, and with that in mind the project was started with enthusiasm rather than trepidation. Unfortunately, we didn't have access to any of the original code for this project, which on a personal level would have been incredibly interesting. This meant that all of the game and handling code needed to be re-engineered, and was written from scratch in ARM assembly language.

The GBA was powerful but even in assembler it was not able to fully duplicate Sega's Super Scaler technology. So the graphics were extracted from the original arcade ROM and then scaled down by Mark A Jones before being cut into sets of GBA sprites, using multiple sprites to recreate the larger game sprites. A great deal of effort was put in by Jas Austin and Martin Wheeler in recreating the waves! The music and effects were reproduced by the very talented Allister Brimble."

"WE REFERENCED MICHAEL BAY A LOT, AS A METRIC FOR HOW INSANE THINGS COULD BE ALLOWED TO GET"
RYAN KAUFMAN

One curious aspect is that the game is based on the original Japanese coin-op and not the 'sequel'. "*After Burner* rather than *After Burner II* was converted due to an initial misunderstanding," reveals Steve. "*After Burner* was originally specified for the conversion, so that's what we converted." There's also some confusion about the barrel roll manoeuvre and whether it's actually included in the GBA conversion. "It does indeed feature the barrel roll. It would have been criminal to not do so. To activate it, you need to hold the two shoulder buttons and move horizontally from one extreme to the other." Of the four conversions, Steve was happiest with how *Space Harrier* turned out. "It plays closest to the original machine. *Out Run* comes in a close second. I have no idea how the pack actually sold, but it seems to have been fairly well-received by reviewers. My favourite review said that the games were not emulations but rather tiny little doppelgängers of the originals."

In 2004 an update of *After Burner* was released for the PlayStation 2 as part of the Japanese *Sega Ages 2500* series. The game was recreated using polygons so it was more of a modern update than a conversion, and not an entirely convincing one. Far better was 2006's *After Burner: Climax* which saw the series finally swoop back into arcades. Sega had released two air combat arcade games in the preceding years – *Sky Target* (1995) and *Sega Strike Fighter* (2000) – but *Climax* was the first proper sequel. Featuring amazing visuals (see those blue Sega skies!) multiple routes, three different jet fighters (F/A-18E, F-14D and F-15E) and numerous other gimmicks to keep it interesting (the '*Climax*' in the title refers to a bullet-time special which you can activate to rack up huge scores). The result was a triumphant return that deserved to share floor space alongside *OutRun 2* (2004) and *OutRun 2 SP* (2004). In 2010 *After Burner: Climax* made the jump to consoles and was released as a downloadable title for the Xbox 360 and PS3, but it was unfortunately delisted in 2014 – and the same fate later befell the iOS and Android versions.

» The home computer conversions were Activision's big hope for Christmas 1988 – although they faced tough competition from Ocean's *Robocop*.

CONVERSION CAPERS
WHICH OF THE HOME CONVERSIONS SOARED?

AMSTRAD CPC
■ The active screen area is tiny (just 208x128 pixels), which can make dodging missiles tricky, but this is otherwise a first-class conversion. It's nice and fast, which helps, plus it's plenty colourful. The absence of in-game music is a shame.

ZX SPECTRUM
■ Similar to the CPC version, only the graphics are limited to two colours. It's fast and responsive though, and overall it's the best you could hope for on the Speccy. The preferred disk version has more music and no painful multi-load.

MSX
■ This is a straight Spectrum port, although it plods along and lacks the speed which was the one thing that made the Speccy version tolerable. Once again MSX owners get stitched up. Avoid it like a heat-seeking missile to your rear end.

C64 (UK VERSION)
■ Great music and front-end presentation can't save this tragic conversion that's ugly, choppy and almost unplayable. What a waste of everyone's time and money. The *Zzap!64* lads hit this with a 17% review score and that was generous.

C64 (US VERSION)
■ This distinct version is heaps better than the UK effort. The screen is bigger and the sprites are a little better, but it still feels a bit *off*. This is probably because it's based on the quirky Master System version rather than the coin-op.

» [Master System] On Sega's 8-bit console, the refuelling sequence is a playable minigame where you have to hook up with the supply jet.

» [Master System] The *Top Gun* influences are obvious, yet the Master System version takes things a little further.

» [Amiga] Two separate conversions were released for the Amiga. Here's the preferred North American release.

» Ryan Kaufman designed and project led *After Burner: Black Falcon* for Sony's PSP.

ATARI ST

■ This looks good but plays poorly. Despite the large border, the framerate chugs throughout and quickly evaporates any excitement. Playing with a mouse feels right, but the controls are so laggy that your poor mouse may get launched.

AMIGA (UK VERSION)

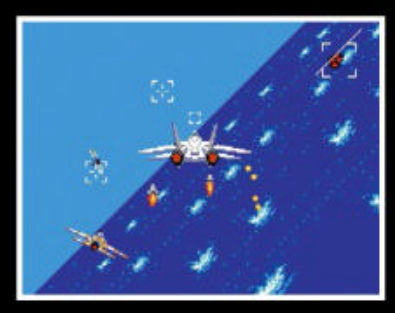
■ The Amiga port arrived around four months after the ST version, but it's difficult to see what improvements were made in that time. The framerate is slightly improved and sampled effects have been added, but it's still another misfire.

AMIGA (US VERSION)

■ As on the C64, the separate version for the US market looks and plays better (albeit running at a fairly sedate pace). And similarly, it's based on the Master System game which means occasional boss fights and no throttle control.

PC

■ This late-to-the-party conversion wasn't really worth the wait. The graphics are OK and the framerate is fine – it's just nothing special. Naturally the music is terrible and makes the soaring tunes sound more like a funeral march.



MASTER SYSTEM

This, the first game for the console to come on a 4Mbit cart, is an attractive conversion where the game's shoot-'em-up qualities come to the fore. The graphics are great – this is easily the best-looking 8-bit version available.

» [Mega-CD] *After Burner III* was a conversion of *Strike Fighter*, with the main difference being that you could toggle between first-person and third-person views.

» [GBA] In case you were wondering, it really is possible to perform a barrel roll on the Game Boy Advance version.

» [GBA] Due to a communication mix-up, the GBA version is based on the original version rather than *After Burner II*.

CONVERSION CAPERS

NES

A Sega smash on the NES? That's right, thanks to this unlicensed release from Tengen. Visually it's not as faithful as the Master System version but it's playable. A prettified version was later released in Japan by Sunsoft.

FM TOWNS

This was the first conversion to really capture the visuals and sounds of the coin-op. The sprites are large (almost too large for the screen area) and the CD audio is fantastic, but of course it lacks the silky smoothness of the original.

X68000

The stalwart of accurate arcade conversions delivers once again. The missile trail effects are basic and the ground detail is lacking, but that's fine because everything else is pretty much spot on. It's a joy to play this version using a mouse.

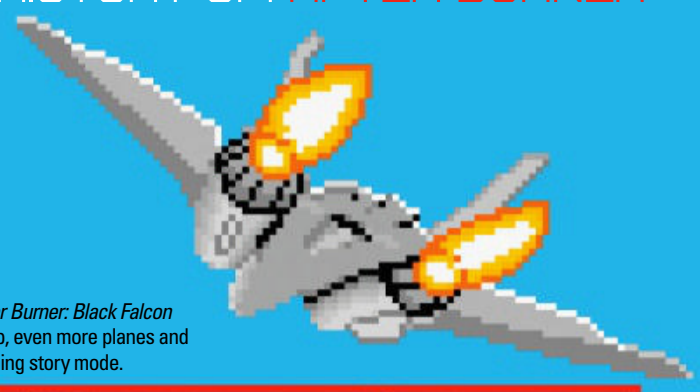
MEGA DRIVE

This is a pared-back port of the X68000 conversion by the same team (Dempa) and that's no bad thing. It seems to get a bad rep these days but this is undeserved. One complaint – the two mid-game landing sequences are missing.

PC ENGINE

Similar to the Mega Drive version, but it comes out on top as all of the coin-op content is included and the air combat feels more fluid. The soundtrack is superb and even features melodies that were cut from the original coin-op.

» [Arcade] Running on Sega's Lindbergh hardware, *After Burner: Climax* is as visually stunning as you might expect.



» [PSP] *After Burner: Black Falcon* added co-op, even more planes and an entertaining story mode.

The most recent game in the series was released exclusively for the Sony PSP in 2007. *After Burner: Black Falcon* was developed by Planet Moon Studios, a US developer that was focused on making games for Sony's handheld. "Sega wanted to revive some of its older brands on the PSP and *After Burner* was chosen as a potentially good fit," says lead designer Ryan Kaufman. "We knew some people at Sega America, so there was already a good relationship there, and they were open to us having some fun with the brand and basically not just doing a port." This was no port. Yes it was a rail shooter but for the first time in the series there was a story mode – or rather three overblown stories involving a trio of elite pilots tasked with retrieving stolen planes from a terrorist group. "We were thinking about what kinds of new experiences we could offer players," reveals Ryan. "I'd been working at LucasArts for ten years previously as a writer/designer, so it was really natural for me to want to include a story, to give the levels an extra sense of progression and context, and tap into something the franchise had never done." For fans of the original coin-op, *Black Falcon* also featured a strong Eighties vibe and lots of in-your-face action. "We are all genuine fans of films like *Top Gun* and *Iron Eagle*, and they have this over-the-top quality that we wanted to capture. We tried to replicate everything Tony Scott was channelling during *Top Gun*. We also referenced Michael Bay a lot, as a metric for how insane things could be allowed to get. Our motto for the game was 'speed, firepower and visual dazzle'. Everything in the game had to fulfil one of those requirements somehow."

Ryan reveals that the project progressed well and there was only one real challenge the studio had to overcome. "Weirdly, the way that a rail shooter actually controls the player's jet is nothing like how a normal game vehicle works. You don't have 360-degrees of freedom, for example. Similarly, the enemy jets that fly by in formation have to move *with* the player's jet in ways that are completely faked, otherwise you'd never have a chance in hell of hitting them. So we had to learn a lot about the secrets of how those mechanics actually worked to get something that felt good and completely natural in your hands. Overall I was really pleased with the results and the game still makes me smile. It's exactly the kind of simple fun that we wanted it to be, but it has enough replay depth that you can spend hours playing it, unlocking everything. I only wish we could have done more with the multiplayer modes and that more people had PSPs to enjoy the local co-op."

Sega's series has remained dormant since the release of *Black Falcon*. The only release of note has been M2's incredible 3DS conversion of *After Burner II* in 2013 (this was only issued physically in Japan on the *Sega 3D Fukkoku Archives 3* collection, but it's available to download from the Nintendo eShop so go and grab it while you still can). Playing the game on the go, in stereoscopic 3D, is great, but at some point we would love to see the series return to home consoles – or even better, the arcades where it made its name and truly belongs.

32X
It's not arcade perfect – it's running at 30fps, half that of the arcade original – but in 1995 this was the closest thing you could get to arcade *After Burner*. Rutubo Games deserves huge credit for managing to emulate the sprite scaling in software.

SATURN
Another Rutubo conversion and this one manages to hit the heady heights of 60fps for the true arcade-at-home experience. To seal the deal it includes a bunch of gameplay options and support for various analogue controllers.

DREAMCAST
Compared to the superb Saturn release, the Dreamcast version is disappointing. There are zero options, so you can't change the awkward default controls, and the music sounds strained. Otherwise it's a fast and very faithful conversion.

GAME BOY ADVANCE
Based on the original *After Burner* rather than the update (for reasons explained in the main feature), this is a decent conversion that struggles to shine on the GBA's small, low-res screen. [I bet it shines on the Analogue Pocket – Ed]

3DS
Not so much a conversion as an outstanding remaster from the ever-reliable M2. There are enough options and extras to please the most dedicated fans, but it's the stereoscopic 3D presentation that injects new life into this arcade classic.

CLASSIC MOMENTS

Alien Soldier

» **PLATFORM:** MEGA DRIVE » **RELEASED:** 1995 » **DEVELOPER:** TREASURE

You knew you should be saving for one of the new consoles, but when you saw *Alien Soldier* in *Sega Power*, you just couldn't resist. After all, the review said it was good and a bit like *Strider*. But when you turned it on, you saw the Treasure logo – the same one you recognised from *Gunstar Heroes*, and it turned out that it was a lot more like that or *Probotector* than it was *Strider*. Still, it definitely was good and more than that, it was really hard.

With a lot of practice and a healthy dose of luck, you finally felt like you were getting towards the end of the game because you'd surely seen every trick the game could pull out of the bag. You were wrong. As a small woman transformed into a big robot thing, some familiar sounding music started, and you realised what was going on. *Gunstar Heroes* had a big transforming robot boss, and it turned out that *Alien Soldier* had one too. Well played, Treasure. Welcome back, Seven Force.

BIO

After making its mark on the Mega Drive with the fantastic *Gunstar Heroes*, Treasure sought to turn the run-and-gun action up to 11 with *Alien Soldier*. This time around, there were larger sprites for both the player and enemies, more bosses with crazier special effects, and the choice of Super Easy or Super Hard modes – nothing in between. It wasn't a sales hit despite a warm reception from the press, and it wasn't released in North America, so the price of original copies today has long been high. Thankfully, it has become more widely available via digital releases and compilations.

MORE CLASSIC ALIEN SOLDIER MOMENTS

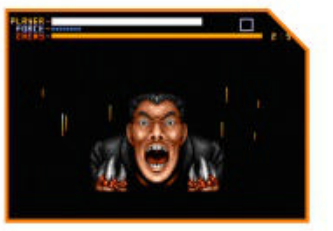
Speedy Smash

One of your most useful moves is the Zero Teleport – it allows you to dash across the screen by pressing down and jump, even if your path is packed with enemies. If you're at full power, it's even better as it becomes a devastating attack that does major damage to anything caught in your wake, at the cost of some health.

Railway Rumble

The train stage is one of the most atmospheric scenes ever seen on the Mega Drive. The locomotive thunders down the tracks through stormy weather, as you battle your way through the enemy-infested carriages. Once you reach a door, you get to burst out and fight bosses on the rooftop as lightning crackles in the distance.

Terrifying Transformation



An unassuming little man in a black suit stands before you. Suddenly, the game cuts to this – a frankly disturbing full-screen image of the man's face. You might just notice the emerging claws as he laughs and his eyes shine, before a monster replaces him. When you return to regular play, he's a towering full-screen menace. Good luck!

Aquatic Attack

Treasure's trademark sense of humour strikes here. A tiny creature helps you out by starting up a boat, only for the vessel to be attacked by a swimming boss. As it climbs up the side of the boat, your fierce little captain tries to drive away the aggressor, only to swiftly realise its error as it's thrown off the screen.

STUDIO PROFILE

DOUBLE FINE

» [PC] Learning a sequel to *Full Throttle* was being planned without his input led to Tim Schafer leaving LucasArts to start Double Fine Productions.

"I REALLY WANTED TO BUILD A DIFFERENT SORT OF CULTURE, WHICH I CALLED THE CULTURE OF MUTUAL RESPECT"
TIM SCHAFER

» [PC] Despite pushing the limits of the team, mind-bending platformer, *Psychonauts* was a criti hit, establishing Double Fine as one to wat

Founded by a group of former LucasArts employees in an old clog shop, Double Fine fought against all odds to become one of the most iconic, creative and enduring companies of the last two decades, before finally achieving financial freedom under Microsoft

WORDS BY HARETH AL BUSTANI

In 1999, after a decade developing successive adventure gaming masterpieces at LucasArts, Tim Schafer was shocked to hear the company was working on a sequel to his blockbuster point-and-click title, *Full Throttle*, without him. "I got pretty down about that because I realised, 'Wow, I really can't control the games I'm making; they don't even talk to me about making a sequel.'" As he watched colleagues leave to start companies like Infinite Machine and Nihilistic, he thought to himself, "If they can do it, maybe I can do it."

After putting the finishing touches on his seminal 3D adventure title, *Grim Fandango*, he worked on an unfinished spy game, before biting the bullet and leaving. "I was just sitting around my apartment in my flip flops and bathrobe with this loose idea," he recalls. The spy game he abandoned would have featured a mechanic that allowed players to meditate on objects and search for clues within their own heads. "I was talking to someone and they were like, 'Tell me about that game where you go into other peoples' heads'. I was like, 'No, you don't go into other peoples' heads, you go into your own head, but wait a second…'"

This misunderstanding quickly snowballed into the concept for *Psychonauts*, a surreal platformer where players travelled through people's minds, healing their past traumas. (You can read about it in issue 228.) As his idea gathered pace, Tim started putting together a team, largely consisting of his LucasArts colleagues. "My first dumb move was not just that I wanted to hire people, but wanted to pay them," he jokes. "I had a lot of royalty money from *Full Throttle*, and I thought, 'Well, we're going to sign a contract really soon, so I'm just going to start paying

people,' and then it took months to sign the contract – so those entire life savings were gone in a matter of months."

Fortunately, *Grim Fandango* had just beaten *Starcraft* to win GameSpot's Game Of The Year, and Tim had more than enough clout to score meetings with publishers to discuss his exciting new project. The only problem was, "We didn't have anything, we didn't have an engine, we didn't have a full design and we didn't have any console experience at all – anywhere on the team. We'd all done PC graphic adventures and now we wanted to do a console platformer".

Tim wanted to create a company that put the lives of its staff first. "I really wanted to build a different sort of culture, which I called the culture of mutual respect. At Lucas, there was a lot of factional fighting across disciplines, like programmers versus artists, artists versus animators, designers versus producers. I wanted to encourage and hire people who were supportive of each other."

In the early days, that collaborative spirit went a long way. For those used to the luxuries of Skywalker Ranch, Double Fine's first office – which was set within a clog shop – was quite a downgrade. "They made purses too," Tim points out. "It was this Spanish couple; I came in to look at the place and they were in there dyeing leather, hammering clogs together and rolling a big joint. They were really mellow people, and they had a band rehearsal space downstairs."

Scott Campbell, who left Lucas to work as *Psychonauts*' art director, remembers the space well, "Whenever a new employee arrived, Tim would buy an Ikea table and paint it some new vibrant colour. We threw some parties there. Erik Ingerson, the lead animator at the time, brought in his smoke machine for one of these parties and it poured out into the street until the cops paid us a visit. We outgrew it upon my arrival."

When Double Fine was eventually asked to leave, the company moved into an old warehouse, with a cement floor. Half of the space was curtained off and designated as a workspace, while the other half was used as

FEELING DOUBLE FINE

DOUBLE FINE, IN THEIR OWN WORDS

TIM SCHAFER

President and CEO

"I think people like working here because it's a very supportive and collaborative environment. And we try to be flexible with the team – way before hybrid workplaces, we had people working in Iceland, Denmark and other countries; we have flextime for parents and things like that. So, it's about taking care of the team and just making really creative original games that aren't like what everyone else is making – we put creativity first."

SCOTT CAMPBELL

Art director, Psychonauts 2

"Absolutely anything is possible at Double Fine. They have created a space that encourages people to take risks. Tim is a perfectionist and cares deeply about storytelling and character development and has such a good time doing it. It is quite contagious. There are so many brilliant and hilarious minds at Double Fine, I cannot wait to see what they come up with every day."

JAMES SPAFFORD

Director of marketing and communications

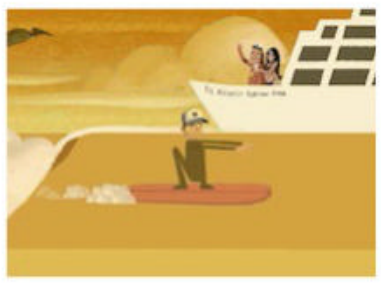
"At the core of Double Fine is an interest in creativity. We rarely do the same thing twice, and we love to celebrate new and interesting ideas. Also central to the company of course is Tim Schafer, who is very keen to try and give back to an industry that has supported him and his company for over 20 years now."

SELECTED TIME LINE

PSYCHONAUTS

Xbox, PS2, PC, 2005

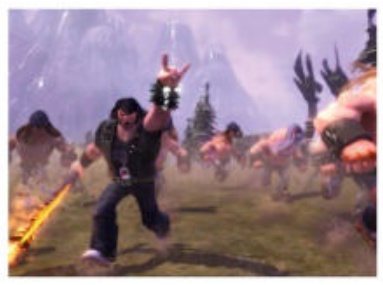
This smart and inventive platformer is the game that put Double Fine on the map. For many fans, *Psychonauts* was game design at its finest.



MY GAME ABOUT ME: OLYMPIC CHALLENGE

Web, 2008

Klint Honeychurch developed this web game based on a semi-autobiographical comic by artist, Nathan Stapley.



BRÜTAL LEGEND

Xbox 360, PS3, PC, 2009

Starring Jack Black, Double Fine's second big title pulled no punches, engulfing gamers with a whirlwind of metal and fantasy-inspired creativity.

COSTUME QUEST

Xbox 360, Various, 2010

This was the company's first Amnesia Fortnight title to receive a full release. The charming RPG was an early download-only hit that received a sequel in 2014.

STACKING

Xbox 360, PS3, PC, 2011

The Russian doll puzzle game, *Stacking*, was largely completed within just two weeks of development. It's another interesting Double Fine release.

DNA OF DOUBLE FINE PRODUCTIONS

CREATIVITY

■ Although Double Fine's library is remarkably varied, every game shares a commitment to pushing creative boundaries as far as possible. From concept to fine details, games are positively overflowing with off-the-wall ideas, settings and mechanics, drawn from an unpredictable set of influences. This atmosphere has allowed the team to conjure beloved games out of thin air; the company's flash titles, for example, began when Tim's blogs snowballed into comic strips by company artists, and then full-blown games.

WORLD BUILDING

■ Tim says the team has always been committed to developing rich lores for every game it creates, "A bunch of concept artists like Peter Chan, Scott Campbell and Nathan Stapley would sit in a room and draw and draw and draw. Peter, doing environmental concept art, would always wonder, 'Where do they go to the bathroom?' If you're building a world you have to think about the lives of the characters in it."

ART

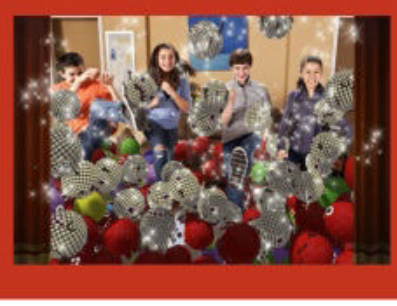
■ With a world-class art team at its disposal, Double Fine's games have never been never short of artistic excellence. Each game features not just its own visual language, but an array of artistic styles and influences that somehow end up working together. Crafted by talent like concept artist Peter Chan, who works regularly for Disney and illustrator, Scott Campbell, the art styles not only create lived-in worlds, but even inform the music composition.

WRITING

■ Since first working on *The Secret Of Monkey Island*, Tim Schafer's always been an exceptionally brilliant writer. At a time where companies were always competing to see who had the best engine, or frames-per-second, Tim focused on areas where he was able to compete. "We were like, 'Well we can't compete on frames-per-second, but we can compete on ideas-per-second!'"

TAKING RISKS

■ For most developers, financing a new company out of your own pocket and going for broke on a project as large as *Psychonauts* would seem completely out of the question. But Tim somehow made it work. Although Double Fine was, for a few moments, pushed all the way to the brink, it has continued from strength to strength, boldly taking on new genres and technologies that few others would dare, and prospering for it.



▶ a car park. Tim laughs, "We were parking right next to our desks, and one guy had a gas leak and it put us all to sleep." Looking back he says, "That was a really creative time. I mean, it was really gross because we had rats, we had no heat, no air conditioning and the toilets would back up every time it rained, but we all look back nostalgically on that era and think about how happy we are that we aren't there anymore." In 2003, following the dot-com crash, the team found a more suitable property for cheap – a space that it continues to occupy to this day.

Inspired by Tim's long-time fascination with dreams and psychology, *Psychonauts* featured a mind-boggling array of characters, levels and powers, all living together within a dazzlingly rich world. When it was finally released, it scored universal critical acclaim, hailed as a creative masterpiece. However, the team had made some major sacrifices along the way.

Tim says, "Back at Lucas, when we were working on *Monkey Island*, if our leader came in and said, 'Hey, we've got to start working nights and weekends,' we were just like, 'Yeah, let's do it,' because we were just so into the game. And the whole game only took like nine months, so it wasn't like a year-long death march. Then with *Monkey 2*, the game got more complicated and we had a longer crunch; everyone's nerves were rattled, fights broke out, it was just very tense. It was not healthy." *Psychonauts*, he reflects, had a worse crunch time than any of the games he worked on previously, because "on top of caring about the game and wanting it to push boundaries, we were also fighting for our life as a company – it was our first game, and we were almost out of money".

Once *Psychonauts* had finally shipped, grateful staff hadn't "come to my office with pitchforks and torches to kill me", Tim says his main priority was to figure out, "How do we never do that again?" Speaking from his own experience, Scott adds, "There was certainly a youthful and naive energy and camaraderie that kept us working long crunch-time hours on *Psychonauts*. We learned from that

SELECTED TIME LINE

IRON BRIGADE
Xbox 360, PC, 2011

■ Double Fine's version of a 'serious' shooter was a tower defence third-person shooter hybrid, where players controlled a dangerous giant mech.

MIDDLE MANAGER OF JUSTICE
iOS, Android, 2012

■ Another Amnesia Fortnight title, *Middle Manager* was Double Fine's only experiment with the free-to-play genre.

KINECT PARTY
Xbox 360, 2012

■ One of Tim's favourites, this Kinect classic remains a party favourite to this day. It's a game that manages to appeal to everyone, even non-gamers.

THE CAVE
Xbox 360, Various, 2013

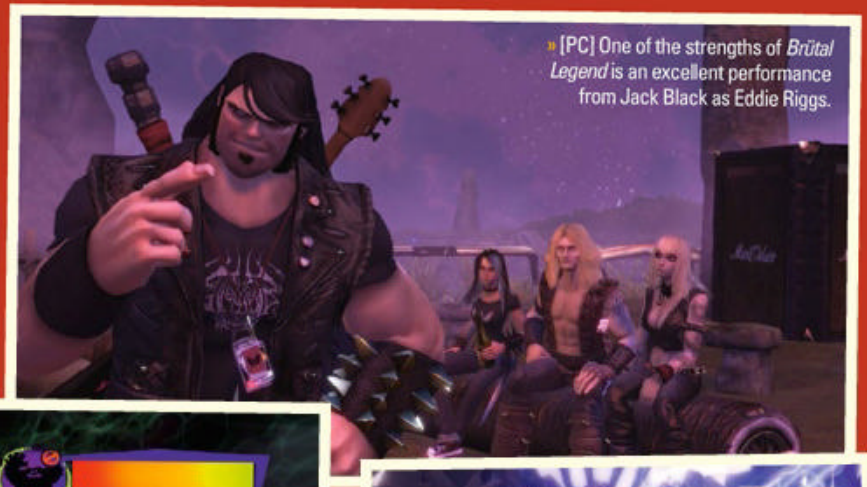
■ *Monkey Island* creator, Ron Gilbert, came in to direct this atmospheric puzzle platform/adventure game, filled with a colourful cast of characters.

HACK 'N' SLASH
PC, 2014

■ Double Fine's first Early Access title, this puzzler was designed by long-time *Zelda* fanatic, Brandon Dillon. It was first prototyped during Amnesia Fortnight 2012.

» [PC] Interesting art design, engaging characters and a strong story are all Double Fine traits and they can all be found in *Psychonauts*.

» [PC] *Psychonauts* was an excellent debut and just what you'd expect from the marvellous mind behind many LucasArts adventures.



» [PC] One of the strengths of *Brütal Legend* is an excellent performance from Jack Black as Eddie Riggs.

» [PC] Riding the *Psychonauts*' momentum, the company's rocking second game, *Brütal Legend* was another enormous project, costing $20 million.

experience and the work/life balance got better."

Psychonauts' success paved the way for Double Fine's next game, *Brütal Legend*; a concept that stemmed from a gag Tim had come up with 15 years prior. "Back at Lucas, we were always trying to make these weird alternative games about pirates and stuff, but we were always competing against high fantasy – *Neverwinter Nights* and stuff like that. And it was like, 'If we're going to compete with them, what if we go even more fantasy than fantasy?' What if we just went so far into that world that it came out the other end? What would the name of that game be?' It was *Brütal Legend*."

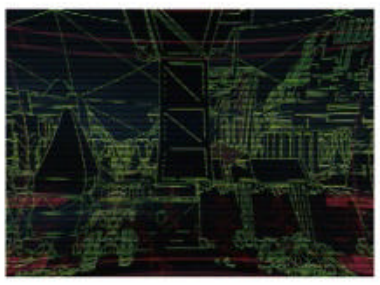
Art director, Scott, relished the fresh start, "After working in the *Psychonauts* style for five years, it felt wonderful to change gears with *Brütal Legend* and that heavy metal fantasy style. The early days of a project are always the most exciting because anything was possible. We would gather every possible object and piece of reference to surround ourselves and just riff on this new world and pile up the ideas."

> "THERE WAS CERTAINLY A YOUTHFUL AND NAIVE ENERGY AND CAMARADERIE THAT KEPT US WORKING LONG CRUNCH-TIME HOURS ON PSYCHONAUTS"
> SCOTT CAMPBELL

Drawing on a huge range of stylistic influences, the game scored a massive lead in *Psychonauts* fan, Jack Black, who lent his voice to the protagonist, Eddie Riggs – a roadie tasked with defeating the Demon Emperor Doviculus with a battle axe and magical guitar. Although the game was generally well-received, the RTS elements later threw some gamers off. Tim explains, "When people came in and tested the RTS parts, they loved it, so we thought it was going to be fine, but we didn't include it in the demo, so when people played the game they felt tricked, which was unfortunate."

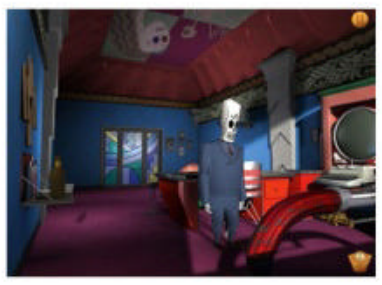
Despite the grumblings, the game's success enticed EA to suggest publishing a sequel, only to later pull out once the team had already hit the ground running on level designs. "So the plane – being the company – was running out of money and clipping the tops of the trees," Tim says. When EA pulled out, Tim said he saw the "writing on the wall" – *Brütal Legend* had cost over $20 million to make, and getting another favourable multi-million-dollar deal for another experimental game simply "wasn't going to be possible for much longer". Tim adds, "I started this company with a big publisher mentality – I'd come from LucasArts and was used to spending millions of dollars on every game, that's how I knew how to do it. But then I saw other independent companies making smaller games, and I thought, 'I wish we could make smaller games and not have the stakes as high.'"

For Double Fine, the answer came in the form of a process they called Amnesia Fortnight. "In 2007, we'd done our first



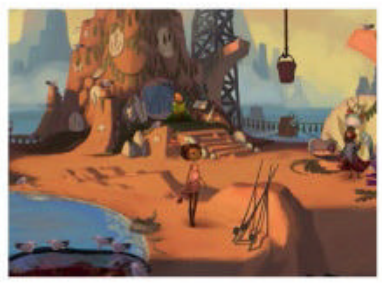
AUTONOMOUS
PC, 2013

■ A throwback to Eighties retrofuturism and VR, this action/survival videogame tasked players with building robots and surviving a ruinous landscape.



GRIM FANDANGO REMASTERED
PS4, Various, 2015

■ The *Grim Fandango* remaster featured stunning orchestral arrangements of Peter McConnell's beautiful soundtrack.

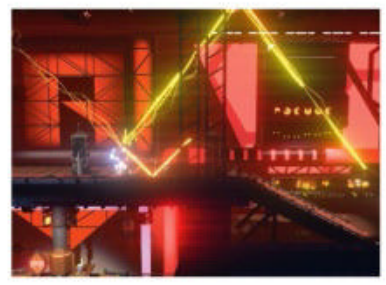


BROKEN AGE
PC, Various, 2015

■ Inspired by classic point-and-click games, it set an impressive Kickstarter record of $3.3 million. It features the voice talents of Elijah Wood and Masasa Moyo.

MASSIVE CHALICE
PC, Xbox One, 2015

■ Another crowdfunded title, *Massive Chalice* was the 11th game to use Double Fine's Buddha engine. It's project lead was *Iron Brigade*'s Brad Muir.



HEADLANDER
PC, PS4, Xbox One, 2016

■ Published by Adult Swim, this nostalgic action platformer title was a throwback to Seventies sci-fi cinema. Metroidvania fans will certainly be interested in it.

» [PC] Remastering classics like *Full Throttle* allowed Double Fine to not only enhance, but preserve them for future generations.

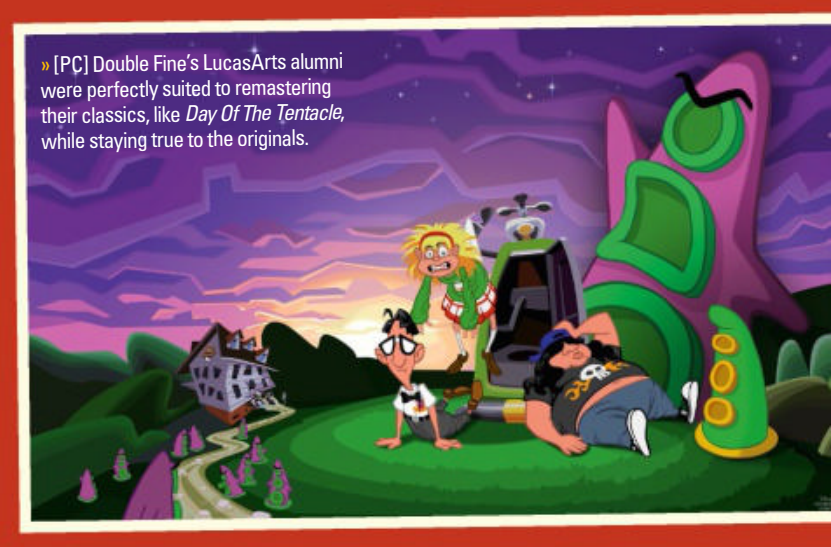
» [PC] When *Brütal Legend 2* was cancelled, Double Fine organised a series of two-week game jams, producing smaller hits like *Iron Brigade*.

game jam, where we forgot what we were working on for two weeks, split the 60-person company into four teams, and had each team make a game in two weeks."

The process allowed the company to simultaneously focus on smaller, less risky titles, while unleashing the talent of its team members. "It was really fun for them because other people got to lead projects besides me, and act as lead animators, programmers and artists, even if they'd never led anything before. Only giving them two weeks was purposely a little stressful, but I think that really brought an intensity out of them that led to something great."

Despite numerous rejections, Double Fine managed to get all four of its Amnesia demos signed – which was a lot easier, given that they were asking for $2 million each, rather than $20 million. "Games like *Stacking* and *Costume Quest*; you could see they were unique and fun for the whole family," Tim says. "They all had their innuendos, but I think there were fewer and fewer bright, friendly, happy games out there – everyone was drawn to the grim and dark videogames. But I read

» [PC] When much of the industry went grim and dark, Double Fine focused on colourful, family friendly titles like *Costume Quest*.



» [PC] Double Fine's LucasArts alumni were perfectly suited to remastering their classics, like *Day Of The Tentacle*, while staying true to the originals.

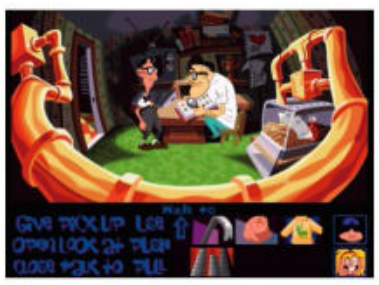
this thing a long time ago like, 'Whatever happened to a character with big red shoes running around?'" he laughs.

The company also experimented with web-based Flash games, which web designer, Klint Honeychurch, based on online comics illustrated by Scott and other artists. "We pursued everything," Tim recalls. "We always tried to be nimble; we did big games, we did little games, we did mobile, we made Kinect games we did a free-to-play game; we did games for weird hardware like the Leap Motion Controller – we were trying everything because we never knew exactly what would be a hit." The company even briefly experimented with the free-to-play format with *Middle Manager Of Justice*, where players managed an office of superheroes "but free-to-play wasn't a natural fit for us; we couldn't get around the feeling of pinching the player".

Tim says he still brings out *Kinect Party* for the Xbox 360 for his daughter's birthday parties. "I loved that game, because you could be in the ball pit or the lava room, and your grandparents or the family dog walks in, and they're in the game; there's no barrier. As a game, it just has so much demonstrable joy."

Later, Tim was interviewed by a film crew for a documentary on *Minecraft* "before I'd even ever played *Minecraft*', and they suggested their next project could be a documentary on Double Fine trying to crowdfund a game. Although he didn't think Double Fine could raise enough for a large project, Tim suggested trying to crowdfund a smaller flash game for $100,000. "I thought that since it is something we don't have to pitch to publishers, let's do something that we could never get signed," like a classic point-

SELECTED TIME LINE



DAY OF THE TENTACLE REMASTERED
PC, Various, 2016

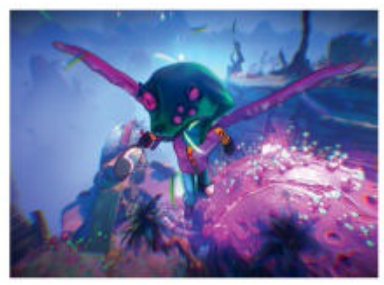
■ Double Fine's LucasArts remasters aimed to capture the spirit of the originals, and bring them into the modern age.

PSYCHONAUTS IN THE RHOMBUS OF RUIN
PS4, PC, 2017

■ Double Fine's return to *Psychonauts* was an attempt to make a VR game that didn't give players motion sickness.

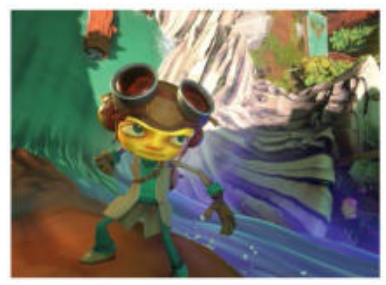
FULL THROTTLE REMASTERED
PC, PS4, PS Vita, 2017

■ Inspired by films like *Yojimbo* and *Mad Max*, Schafer's *Full Throttle* was finally given the overhaul it deserved.



RAD
PC, Various, 2019

■ The roguelike *RAD*, set in a rich "post-post-apocalyptic" world, tasked players with mutating their way across the wasteland. It was published by Bandai Namco.



PSYCHONAUTS 2
PC, Various, 2021

■ The long-awaited sequel to the game that started it all off, *Psychonauts 2* landed to thunderous ovation and is an utterly superb sequel.

» [PC] The *Grim Fandango Remaster* allowed Peter McConnell to give the game's score the sweeping orchestral arrangement it deserved.

» [PS4] Released shortly after the successful *Psychonauts 2* crowdfunding campaign, *Rhombus Of Ruin* began as an attempt to make a VR game that wouldn't make people sick.

» [PC] Double Fine's desire to create a classic adventure game proved so popular, the *Broken Age* project set a Kickstarter record of $3.3 million.

and-click adventure game. As it turned out, the "story of people making something that the gatekeepers of the time didn't allow was so compelling to people that they all jumped in". Double Fine's project amassed a record-shattering $3.3 million in just over a month.

"It felt like that last scene in *It's A Wonderful Life* – like a basket of money was being dunked on my head. All these people cared that I didn't even realise were out there caring." But now, the company had to revise the scope, and to scale it up into a much larger game. "We designed a game that was even bigger than that budget – we had to use a lot of our own money, and then raise money by selling the first half of the game to fund the second half."

Tim was thrust back into the director's seat for *Broken Age*, a nostalgic blast from the past, marked with Double Fine's characteristic attention to detail, stunning art, masterful game design, remarkable creative depth and voices not just from Jack Black, but Elijah Wood.

> "IT FELT LIKE THAT LAST SCENE IN IT'S A WONDERFUL LIFE – LIKE A BASKET OF MONEY WAS BEING DUNKED ON MY HEAD"
> TIM SCHAFER

With love for adventure gaming in the air, given how many Double Fine team members had worked on classic LucasArts titles, it seemed like the perfect time to remaster them. "People often ask, 'What killed adventure games?' but they never died – you could always sell 200,000 copies of an adventure game," Tim muses. The Double Fine remasters of *Day Of The Tentacle*, *Full Throttle* and *Grim Fandango* were so successful that the *Grim* remaster actually outsold the original run – which had broken 500,000 copies. It also allowed composer, Peter McConnell, to create a new, sweeping orchestral arrangement, reflecting the company's approach to remastering the beloved classics.

Tim reflects, "It's like you make this public work of art, like a statue and it ends up covered in pigeon crap and then the head falls off – I just wanted to take care of this thing that we made so other people could enjoy it for years to come. And that's what we did, bringing it into modern resolutions and making games that you couldn't even legally buy anymore available again."

In 2015, the team launched another ambitious crowdfunding campaign; this time to finance the long-awaited sequel to the legendary game that started it all, *Psychonauts*. Exceeding expectations, the company raised $3.8 million from 24,000 backers. With gamers growing increasingly impatient over a lengthy development cycle, Double Fine whet their appetites with the ingenious virtual reality title, *Psychonauts In The Rhombus Of Ruin*, yet again experimenting with emerging technology, before finally launching *Psychonauts 2* in August 2021 to overwhelming commercial and critical acclaim.

Along the way, after losing two publishers, it almost looked like the team was going to have to make some drastic cuts, until Microsoft swooped in with a once-in-a-lifetime offer. Rather than just investing a piecemeal, or flat out gobbling Double Fine up, Microsoft acquired Double Fine as a "limited integration studio" – allowing it to retain its independence, as it focused on developing games for Xbox and Games Pass.

Yet, as Double Fine moves into the next stage of its adventure at double speed, at its heart, it's very much the same company that began in that clog shop two decades ago. Tim reflects, "We've always believed in what we're doing, we've always loved the games that we're working on, and our games have always come from a very personal place. We've always been willing to take big risks because we didn't have a ton to lose most of the time – we were flying very close to the trees. Games are always going to be hard to make, and risky, so you might as well make exactly what you want, and make it really well."

GIVING BACK

After the successful *Broken Age* Kickstarter, Double Fine found itself increasingly being approached by smaller developers asking for advice on how to approach large companies. The company not only started offering wisdom, and co-working spaces, but branched out into publishing – helping indie developers gain a first foothold into the industry.

Although the company wound down its publishing arm since the Microsoft takeover, it has also supported the industry through its pioneering Day Of The Devs event. Director of marketing and communications, James Spafford explains, "Part of the Kickstarter for *Broken Age* involved us letting folks play early, and with so many backers we had to find event space, as the Double Fine studio space is way too small. But, having an event just for our one game seemed crazy, so we reached out to some friends and invited them to bring their games too. We turned it into a party, a mini festival even – with DJ Phil Fish headlining."

The team had such a blast, they decided to host it every year, giving indie developers a chance to show off their games for free. The most recent event, co-founded with iam8bit, in 2019 hosted 80 games and 10,000 people and though COVID put a temporary stop to it, Double Fine's hoping to return with a vengeance for the event's tenth anniversary.

ULTIMATE GUIDE

FANTASTIC NIGHT DREAMS COTTON™

WHEN THE WHOLE WORLD IS PLUNGED INTO DARKNESS, IT'S TIME FOR A HERO TO STEP UP. UNFORTUNATELY, A HERO ISN'T AVAILABLE SO COTTON WILL HAVE TO DO. WE LOOK AT EVERY ASPECT OF SUCCESS' COLOURFUL CUTE-'EM-UP TO SEE WHY IT BECAME SUCH A CULT FAVOURITE

WORDS BY NICK THORPE

Here at Retro Gamer, one thing that we don't understand is why more developers don't try to do cute takes on popular genres. Given the success of *Pokémon* in the Japanese RPG realm and *Splatoon* in multiplayer third-person shooting, we're surprised that nobody has tried to do a take on *Grand Theft Auto*, but with fairies borrowing unicorns rather than gangsters carjacking terrified civilians. Thankfully, shoot-'em-up developers are a sensible bunch and have realised that bold colours and a little sparkle go a long way – that's why we have so many cute-'em-ups, and the enduring *Cotton* series by Success is one of the most memorable examples of the style.

The story of *Cotton* is quite a simple one. A great evil mist has fallen upon the world, stealing away the light to leave it in a state of perpetual night-time. If that wasn't enough, there are all sorts of monsters wandering about the place too. Enter Silk, a fairy who seeks someone that might just be able to save the world. She happens upon Nata de Cotton, a young witch who happens to love a type of candy called Willow. Unfortunately, Cotton doesn't have any particular interest in heroism and starts to wander off, until Silk tells her that beating the evil bosses might just reward her with special Fairyland Willow. With the right reward in mind, our protagonist hops on her broomstick and flies off to confront the forces of darkness.

In gameplay terms, this translates to a fairly standard sort of shoot-'em-up. You can fire regular shots by tapping one button and drop bombs on the ground with the other, with special magic spells available by holding either or both. Silk follows you around like the Option drones from *Gradius* games, and if you shoot certain urn-faced enemies, they will often present additional fairies that act in the same way. You'll fight all sorts of weird regular enemies, mid-bosses and the obligatory end-of-level bosses, some of which are rather spooky looking. Once you've smashed them to bits, it's Tea Time, meaning that dozens of cups of tea fall from the sky as you try to catch as many as possible to score bonus points.

Cotton handles power-ups in an interesting way, as your firepower is determined by an experience gauge at the bottom of the screen. Shooting enemies will fill this, but you'll have an easier time filling it by collecting the yellow and orange crystals dropped by enemies. However, you can shoot these to keep them in the air, and doing so may

» [Arcade] Around the half-way point, these spiked barriers start to appear as a nuisance.

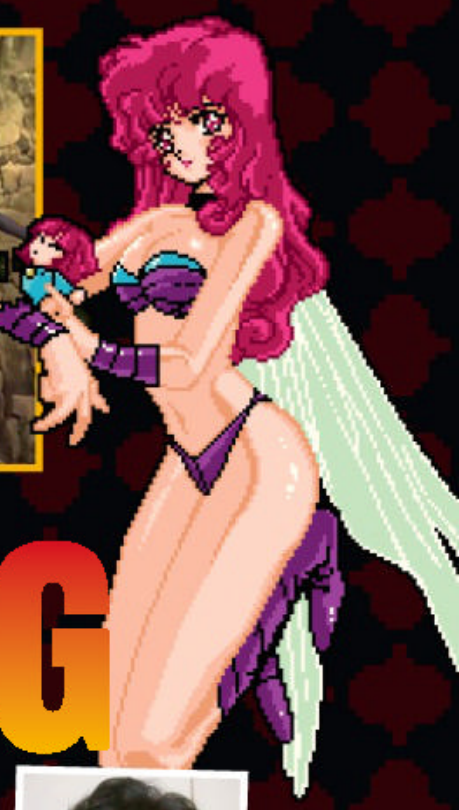
» [Arcade] In the final main stage, the game really starts throwing just about everything at you.

cause them to change colour – if you get a red or blue one, you can stock up on additional magic attacks. As you'd expect, each level requires more experience to advance than the previous one, and losing a life will reduce your firepower. You can also pick up bomb power-ups, which simply increment the power of the bombs in stages.

One other interesting thing about *Cotton* is the way it handles continues. The first time you lose all of your lives during a stage, you'll be able to continue from the place you died. If you manage to lose your next set before finishing that stage, using another continue will see you returned to the beginning of the stage, effectively ensuring that you can't just credit feed your way to the end of the game – you need to develop at least some skill to progress. How much you like that idea will depend on your aptitude for shoot-'em-ups, of course.

Though the shooting is well put together and the stages are interesting, much of the game's charm depends on the amusing story being told. The English translation is questionable, but there's no denying the fun factor of a decidedly unheroic protagonist who is driven into action purely by her sweet tooth.

» [Switch] New bosses make their mark – hopefully not burn marks on poor Cotton's face.



WEAVING COTTON

SHINYA NAGATOMO AND TOSHINOBU KONDO TALK ABOUT COTTON'S PAST AND PRESENT

» Toshinobu Kondo is Studio Saizensen's game director.

Cotton has been around for a long time, but it has retained a great deal of cult popularity over the last 30 years. "It's probably because the shocking impression we made back then has stuck in everyone's mind," says Shinya Nagatomo, a producer at Success. You can detect the pride when he speaks about the series. "There are many elements in this game that are world firsts in many ways," he tells us. "The prototype version did not have a story, and I heard that it was our president Yoshinari's order to add one." As we've discussed, the personality of Cotton herself was a great deal of the game's appeal, so it's surprising to learn that the game didn't initially incorporate it. "At the time, it was unthinkable to add a story to an arcade game, which would have increased the playing time, so I think Yoshinari had the foresight to make this decision," says Nagatomo.

Our favourite Willow-obsessed witch has recently taken flight again with *Cotton Fantasy: Superlative Night Dreams*, which began with Nagatomo. "I submitted a plan for the 30th anniversary of *Cotton* in a planning competition in Success, and it was accepted," he says. "Also I'm a fan of *Cotton* myself, and I wanted to make sure we don't run out of new *Cotton* games." The game isn't straying too far from the established formula. "It's basically the same principle. It's an all-star game with not only characters from other games, but also new systems from other Success games," explains Nagatomo. "I wanted to make it a festive game for the 30th anniversary celebration of *Cotton*, and add a lot of additional content and value to the game."

Essentially, you should expect *Cotton*, but turned up to 11. According to Toshinobu Kondo, the game director at developer Studio Saizensen, the switch to polygonal graphics hasn't caused problems. "I don't think there is a big difference," he replies when asked about the difference between working with 2D and 3D. "However, in the case of 2D graphics, it may be harder because there are fewer people who can draw dots." Fitting in all the action was a challenge, though. "There were so many things to display on the screen, such as bullets, explosions and other effects, it was very difficult to display them without strengthening the graphics driver," Kondo tells us. The excellent new soundtrack was handled in-house at Success. "[Kenichi] Arakawa, a member of the Success Sound Team, is the sound director," says Nagatomo. "Arakawa is also an experienced composer with over 30 years in the industry."

Cotton Fantasy: Superlative Night Dreams is out now digitally for Switch, PS4 and PC. Physical copies for Switch and PS4 will arrive later this year via ININ Games.

» [Switch] Classic magic attacks make their return, and look more spectacular than ever before.

CONVERSION CAPERS

FIND OUT HOW COTTON'S MAGIC WORKED SLIGHTLY DIFFERENTLY ON EVERY MACHINE SHE VISITED

PC ENGINE CD

YEAR 1993

■ The first home port of *Cotton* naturally can't match the graphical grunt of the arcade game, though there's plenty of effort – check out the ground waving during the first boss. The strength of this version is its excellent CD soundtrack, which blows away most other home versions of the game.

SHARP X68000

YEAR 1993

■ This is a great *Cotton* game, but not one that will please arcade purists as it's almost a remix rather than a straight conversion. There are graphical enhancements to be found here, as well as level-design changes and difficulty adjustments – some of the bosses have even been replaced completely.

PLAYSTATION

YEAR 1999

■ If you're looking for arcade accuracy, this was the first of the home conversions to really deliver that, as it looks and plays practically identically. The most noticeable change is that the music is slightly different – it sounds as if the original data is being played through a different synthesiser.

NEO GEO POCKET COLOR

YEAR 2000

■ This version traded primarily on its portability and plenty of compromises had to be made for it to work – visual details have been cut, some enemies and attacks are omitted and the difficulty is adjusted to compensate. It uses the system well though, and retains the spirit of the original.

SWITCH/PS4/PC

YEAR 2021

■ This updated version (called *Cotton Reboot!*) is based on the X68000 version, and features brand-new HD graphics and music as well as revised game mechanics. It's an excellent remake, albeit a very visually busy one. If that doesn't appeal to you, the original X68000 version is included for good measure.

AND THE REST

■ The PlayStation version of *Cotton* was reissued on the PlayStation Store in 2007 in Japan only, and can be downloaded for play on PS3, PSP and Vita. The original arcade version of *Cotton* was included on Sega's Astro City Mini console in 2020, and as you'd expect, it's a straight emulation with no changes or enhancements.

▶ Cotton is exactly the sort of comedic character that would have appealed to the anime otaku crowd of the era, and the cutscenes between stages are amusing – for example, Silk only manages to keep Cotton from the Willow she gets from the first boss by explaining that if she gathers them all together, a big Willow will appear.

Success used Sega's System 16 arcade board as its hardware for *Cotton*, and Sega marketed and distributed the game as a result. It was released in Japanese arcades April 1991, and soon followed to the rest of the world. The 1 June 1991 issue of *Games Machine* ranked it as Japan's 9th most popular table game (a term used to describe games that didn't require dedicated cabinets) of the past fortnight. It remained in the top 25 ranking for a month afterwards before disappearing, so while it didn't have the same staying power as shoot-'em-up contemporaries like *Raiden* and *Alpha Mission II*, it was moderately popular and earned enough recognition to receive a variety of home conversions.

There were not many home conversions initially, though. The PC Engine was the first home system to receive a version of *Cotton*, as a Super CD-ROM release that hit both Japan and North America. This version earned 90% in *C&VG*, with the review cautioning readers, "Don't make the mistake of thinking that because it's weird it's not difficult." American magazine *GameFan* ranked it as "one of the top three shooters available for the Duo", and praised it for its visual effects and music, though noting that it had a "ridiculous" story. Averaged out, the magazine's four reviewers gave the game 80%. The Sharp X68000 version was only released in Japan, but it was well-received, earning 9/10 from the Japanese magazine *Oh!X*.

Success revisited the original *Cotton* as a nostalgic release, first on the PlayStation. *Famitsu*'s reviewers were collectively unimpressed, awarding it a combined score of 21/40. In the USA, *GameFan*'s review was more positive, encouraging readers to "turn your back on the Polygon Menace for a second" as it was the kind of game that

» [Arcade] This guy's a nasty piece of work, firing an eye beam forward and then looking up to rotate it 90-degrees.

» [Arcade] *Cotton*'s stages can scroll in all directions, adding a welcome bit of variety to proceedings.

» [Arcade] We're not really sure why these fairies aren't on the side of Cotton and Silk, to be honest.

would "painfully remind you of what today's video games are lacking", though questioning the amount of slowdown present. The Neo Geo Pocket Color version that followed was the first version of *Cotton* to make it to Europe. GameSpot gave this version 7.1/10, noting that, "Die-hard fans who can stomach the readjusted gameplay will find it a worthy purchase, while newcomers should find it an endearing introduction to the genre."

The *Cotton* series would soon branch out with sequels and spin-offs. A sequel named *Cotton 100%* appeared on the SNES in 1994 and reached the PlayStation almost a decade later, while the technically impressive rail shooter *Panorama Cotton* arrived on Mega Drive later that year. *Cotton 2: Magical Night Dreams* was released into arcades in 1997 and later hit the Saturn, and was remixed as *Cotton Boomerang* in 1998, which also reached Sega's console. The Dreamcast received *Rainbow Cotton*, another rail shooter in 2000. In 2021, the series was properly revived with *Cotton Fantasy: Superlative Night Dreams* for arcade, PS4, Switch and PC.

Cotton would have been a good game if you played as a helicopter gunship or an interplanetary space fighter, but the fact that you didn't is precisely what makes it so memorable. *Cotton* is having something of a comeback today, and the series stands out now for exactly the same reason the original did in the Nineties – which other game lets you play as a cute witch with an overwhelming candy addiction? It all goes to show that sometimes, a game's style is just as important as its substance. ✱

BOSS RUSH

THESE ARE THE BIG BADDIES THAT WANT TO STAND BETWEEN COTTON AND HER CANDY

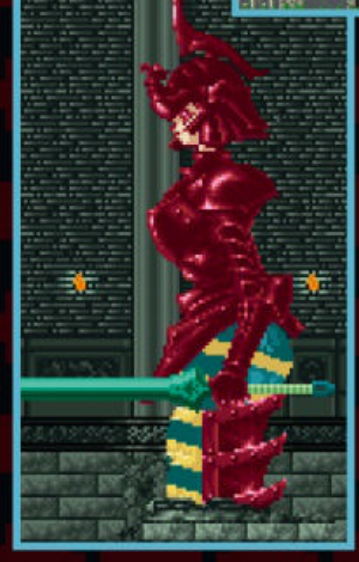
STONE FACE

The game's first major enemy will occasionally slam into the ground, causing it to shake. It fires rocks from its head like a volcano, but their limited range won't trouble you if you keep your distance. The green projectiles it fires from its underside might, though – these are spread out in a wide arc, so keep your wits about you.

GIANT ZOMBIE

This is a major difficulty spike. The zombie's skull will float around firing bullets that slowly track Cotton's position, and its arms will shoot across the screen at her too. The torso discourages you from getting close with two waving appendages, and while it mostly stays put, when it leaps to the left of the screen it does so very quickly and without warning.

SNAKE SOLDIER

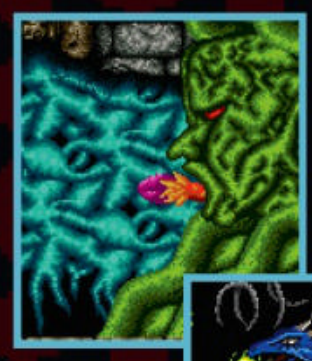


The top-left of the screen is your safest space here, as this enemy can't quite reach that corner. That's not to say this is easy, though – while the projectiles the boss fires are slow moving and can be destroyed, you've got to be mindful of sneaky attacks from the bottom of the screen. These go left to right in sequence, so they shouldn't surprise you.

SPHINX STATUE

In the first phase here, the very obvious glowing red weak point is where you'll want to focus your attacks. Enemies continually spawn from the head and leap toward Cotton, so don't get too close, and watch out for the constant rising bombs. In the second phase, the lizard head fires homing bullets with a slow-turning curve, so let them get close before dodging.

MUTANT MONSTER



This creature's arms take turns in emerging from the top and bottom of the screen, sweeping right towards its ugly green face, so stay back and try not to fly too high or low. The plant-like thing that emerges from its mouth is its weak point, but it also fires a fast spread of projectiles and can be protected from incoming fire by those big arms.

VOLCANIC DRAGON

The last of the regular bosses tracks Cotton's position with its head and fires some pretty fast shots at her, requiring vertical movement to avoid. The mouth on its torso will also fire rising, curved shots. When it disappears into the lava, it can emerge on the left of the screen. When that happens, avoid the rocks spewing from the lava and charge your magic.

WOOL

The game's final villain teleports around the screen, usually with her shield raised. She's invulnerable as long as it is up, and she will only drop it in order to launch homing rocks at you in groups of three. These will follow Cotton until destroyed – hopefully you've got some fairies in reserve to help – and drop crystals when they are, allowing you to restock magic.

Machine Hunter

HUNTING FOR BETTER CONTROLS

» PLAYSTATION » 1997 » EUROCOM

On the day before my 12th birthday, I went to a party at a family friend's house. I always looked forward to these parties, as there would always be great food and plenty of other kids to see, and Ron would be there. Ron was the coolest adult in the world, as far as I was concerned, because he loved games just as much as I did – maybe even more. He used RGB SCART so games looked awesome. He knew all the cheats, and had an Action Replay just in case. He had introduced me to amazing games like *Gunstar Heroes* and *Rocket Knight Adventures*. And on this day, he gave me a big stack of PlayStation demo discs and even a few full games that he was finished with. Somehow, I genuinely didn't guess I would receive a PlayStation the next day. I am not smart.

One of those games was *Machine Hunter*, which was one of the last ones I tried because I had never heard of it. As it turned out, it was quite an exciting game – a gory top-down shooter in which you had to go around rescuing hostages, with the unique hook being that mechanical enemies could be taken over once defeated. At the time it felt to me like a faster, more exciting take on *Alien Syndrome*, though I'm now aware that it was heavily inspired by *Loaded*. I had plenty of fun with it in the late-Nineties, and I wish I still could.

The face buttons are mapped to fire in different directions, which *should* be fine. But the game often reacts in weird ways when you change your movement direction, and diagonal firing is obviously a bit fiddly. After years of twin-stick shooters, I just want to move with the left stick and shoot with the right, but you can't do that. I'm hoping that some enterprising modder will add support for analogue controllers into the game, and perhaps fix up the controls a bit for digital pads too. Until that day comes, this is a game that I'll sadly struggle to return to.

100 %

THE EVOLUTION OF

PROJECT GOTHAM RACING

When profits on its Dreamcast title Metropolis Street Racer failed to materialise, Bizarre Creations reimagined its game for the Xbox as Project Gotham Racing. Bizarre founder Martyn Chudley revisits Project Gotham Racing and the series it inspired

WORDS BY RORY MILNE

» [Dreamcast] Introduced in *Metropolis Street Racer*, Hot Laps task you with racing a lap in a set time.

» [Dreamcast] One-on-one events are a *Project Gotham Racing* series regular that first appeared in *Metropolis Street Racer.*

» [Xbox] Unlike *Metropolis Street Racer*, you get Kudos for driving on two wheels in *Project Gotham Racing.*

MARTYN CHUDLEY

» As well as the *Project Gotham Racing* series, Martyn Chudley produced two *F1* games and *Blur*.

It's said that everything is relative, and this was certainly the case with *Metropolis Street Racer*. The Bizarre Creations title reviewed well and was enjoyed by Dreamcast owners, but there just weren't enough of them, and so Bizarre took steps to recoup the costs of its game's development. This ultimately led to a meeting with Microsoft, as Bizarre founder Martyn Chudley explains. "Basically it was clear to us that we wouldn't get a financial return on the Dreamcast with *Metropolis Street Racer*," Martyn concedes. "We were well over budget and the platform was *dying*; it was being dominated by the PS2. We knew Sega itself was going to go multi-platform, and that could have been our preferred option, but it was still publicly in denial. So we approached Microsoft with a rough spec for a new racing game, with the hope of being given access to the upcoming Xbox."

» [Dreamcast] *Metropolis Street Racer* introduced the street racing that the *Project Gotham Racing* games are known for.

"THE KUDOS SYSTEM WAS OBVIOUSLY PROJECT GOTHAM RACING'S MAIN USP – IT WAS THE THING THAT TOOK US AWAY FROM OTHER RACING TITLES"
MARTYN CHUDLEY

In fact, Martyn didn't even consider other systems. But given that the Xbox was just a year away from launch, Microsoft asked for a conversion of his Dreamcast racer rather than a new title, not knowing that Sega owned the name *Metropolis Street Racer*. "As for the other consoles, we felt that the PS2 was a sideways step performance-wise and that the GameCube would have been a backward step," Martyn notes. "But Microsoft was interested enough for us to take a demo of *Metropolis Street Racer* down to London, at which point it said, 'Can't we have that on Xbox?' We said, 'Well yes… and no.' Yes to the fundamentals of the game, but no to the name. And the rest, as they say, is history!"

Of course, Bizarre's Xbox racing game could have just been called something else while playing exactly like *Metropolis Street Racer*, but the firm had other ideas. "It was the way we were!" Martyn grins. "Ultimately we had to do a complete rewrite of the engine for the new hardware, and the new city content and vehicles seemed to push the game into a new direction. We had seen what worked, and what didn't work – and *Metropolis Street Racer* was a year late, so we were rather tired of it! So adding the new features to make *Project Gotham Racing* a truly worthy launch title for a new platform seemed to be the only way to go."

Many of *Project Gotham Racing*'s new features evolved from its predecessor's, however, such as its 'Kudos' mechanic, which rewarded stunts like driving on two wheels. "The Kudos system was obviously *Project Gotham Racing*'s main USP – it was the thing that took us away from other racing titles," Martyn considers. "With the assistance of Microsoft and its consumer feedback we found that people really enjoyed the more extreme but highly targeted actions, so we actively looked at pushing that area."

Project Gotham Racing further differentiated itself in how it scored its events, in that your Kudos after multiple attempts reflected your best effort and not your last. "If I remember correctly it was again done with Microsoft's advice, and the 'best attempt' was seen to be more

STAGES OF EVOLUTION: EARNING KUDOS

THE NOVEL REWARD SYSTEM FOR STYLISH DRIVING

METROPOLIS STREET RACER

In *Metropolis Street Racer*, Kudos means respect for skilful driving. You get some for finishing first, but not enough to unlock new cars and events. So to make up the shortfall you have to do stunts during races – like drifting around corners, while avoiding deductions for collisions.

PROJECT GOTHAM RACING

Project Gotham Racing's Kudos system differs from its predecessor's, in that it's based on your best attempt at an event and not your most recent, which removes the risk of doing worse than before. It also displays your Kudos on-screen, so you can tell how near to your quota you are.

PROJECT GOTHAM RACING 4

Kudos is at the heart of *Project Gotham Racing 4*, but it can be accumulated by displaying skill and speed as well as style. So the likes of two-wheel driving and power-slides still add to your tally, but you can also rack up points by maintaining a good racing line or going flat out.

STAGES OF EVOLUTION:

WORLD TOUR

THE CITY STREET COURSES OF PROJECT GOTHAM RACING

PROJECT GOTHAM RACING

Although far from the first racing game with a global reach, *Project Gotham Racing* gives you a real flavour of the cities it portrays. As well as recreating the weather experienced in San Francisco, London, Tokyo and New York City, it incorporates local landmarks and radio stations.

PROJECT GOTHAM RACING 2

You might expect *Project Gotham Racing 2* to be set in a few more locations than the original, but the sequel goes for broke by featuring no less than 11 cities – each one new to the series. Smaller venues like Florence and Edinburgh feature, both of which have cobbled street courses.

PROJECT GOTHAM RACING 4

The fourth *Project Gotham* covers all the bases by revisiting locales from the previous games plus introducing new cities to race in like Quebec City and Shanghai. It also includes a fictional Michelin test track, which has eight different routes to try out cars on before buying them.

casual-consumer friendly," Martyn reviews. "Personally, I liked the risk/reward element of the *Metropolis Street Racer* implementation, but it was pretty hardcore! As for displaying Kudos on-screen, it was just seen as more casual and more instantly gratifying."

> **"WE FELT THAT WE NEEDED MORE VARIETY FOR THE SEQUEL. ULTIMATELY MORE CITIES MEANT SCOPE FOR MORE VISUALLY INTERESTING AND EXCITING TRACKS"**
> **MARTYN CHUDLEY**

As well as awarding Kudos points for stylish driving, *Project Gotham Racing* also introduced a skill-based challenge, which took its lead from US amateur racing. "The cone challenges were interesting, as they added a new dynamic to the game," Martyn reasons. "They weren't just about speed, winning or showing off. They allowed us to have a much more precise indicator of the player's skill. I remember one of the Microsoft guys we had on the team being into cars and racing in a big way, and I think he used to do autocross out in the States where they use cones on airfields to create 'circuits' – so I'm guessing it came from that!"

Wherever their origin, *Project Gotham Racing*'s challenges went down well when the Xbox launch title came out. Two years later, a sequel featuring 11 cities followed. "After the inclusion of New York in *Project Gotham Racing* – over *Metropolis Street Racer*'s London, San Francisco and Tokyo – we felt that we needed more variety for the sequel," Martyn explains. "We were proud that we created so many unique circuits within the earlier games' small city areas, but ultimately more cities meant scope for more visually interesting and exciting tracks. I think the artists liked the travelling as well! The choice of new cites was based on a multitude of data points – customer research, team input, marketing territory, etc. We wanted to go as wide as possible."

At the heart of *Project Gotham Racing 2* was its solo Kudos World Series mode, which was divided into events that each featured different categories of cars. "If I remember correctly, as the specs of the cars got wider and wider the balancing of the gameplay got more and more difficult," Martyn points out. "In *Metropolis Street Racer* we had the 'CPF' – Car Performance Factor – to balance up the relative performance of each vehicle, but going from SUVs to hypercars was a bridge too far. So keeping the cars 'banded' gave a much tighter balancing to the game."

One challenge of note in *Project Gotham Racing 2*'s Kudos World Series was its speed camera event, which added cornering to the previous game's straight road speed tests. "I'm guessing that it was based on consumer feedback – Microsoft provided a *lot* of that," Martyn recalls. "If the speed challenges were low down on the consumer satisfaction then adding the skill element was our way to try to up their overall quality. Also with speed cameras, these were *relatable* to the man in the street, rather than having an arbitrary point or line on the track to pass."

Besides gameplay improvements, *Project Gotham Racing 2* also bettered the original in the way that it presented the cars that players owned

» [Xbox] Not all of *Project Gotham Racing*'s events are races, some even involve dodging traffic cones.

» [Xbox] In *Project Gotham Racing* your Kudos reflects your best attempts, no matter how poor your later efforts are.

» [Xbox] Rather than a list of vehicles, *Project Gotham Racing 2* has a virtual garage that you can walk around.

» [Xbox 360] Instead of various classes of car, *Project Gotham Racing 3* almost exclusively features supercars.

» [Xbox] *Project Gotham Racing 2*'s Kudos World Series is a sequence of events featuring different classes of cars.

» [Xbox] As well as cars, there's a playable coin-op called *Geometry Wars* in *Project Gotham Racing 2*'s garage.

or could consider buying. "We needed to up our game from *Metropolis Street Racer* and *Project Gotham Racing*," Martyn observes. "Having showrooms was one of the obvious ways of not only showing off the hardware prowess of the Xbox and the amount of detail we could put into the car models, but also giving the player a real sense of ownership and their own personal vehicle collection, rather than just having a list."

Hidden in the garage used to store players' vehicle collections was a playable coin-op called *Geometry Wars*, but was it an Easter egg or a teaser for a full release? "It was just an Easter egg," Martyn clarifies. "Cakey – *Geometry War*'s coder Stephen Cakebread – had made a super-cool game, and we thought what better way to expose it than have it as part of a potentially multi-million selling product. We never even considered that it could be a standalone product. It was only the advent of Xbox Live Arcade that gave us that opportunity!"

Two years later, around the same time that Bizarre was creating its XBLA *Geometry Wars*, the firm was also developing the supercar-focused *Project Gotham Racing 3*. "I think we felt that as *Project Gotham Racing 3* was going to be a launch title for Xbox 360 that going down the supercar route was a good way to show off the 'next generation-ness' of the game and the console," Martyn remembers. "We put a lot of effort into those car models, particularly the interiors and audio, to give that truly next-gen experience."

Changes to gameplay established by the prior games were also noticeable, including a switch to unlocking cars by doing well in events instead of racking up Kudos. "Once again it was all about balancing, if I remember correctly," Martyn ponders. "Also, more and more Microsoft 'eyes' were on the product, and with every iteration a lot of the previous games' 'rough edges' were taken away, leaving a more and more consumer-friendly but ultimately less innovative game."

Fresh challenges were another hallmark of *Project Gotham Racing 3*, such as Eliminators, where being in last place when a clock hit zero meant disqualification. "Again, it was all about giving something 'new,' and to try to 'polish' out some of the hardcore elements," Martyn recollects. "We were open to all ideas, and many of these came from the gaming community itself. We were at a time when we could get real feedback from real players much more easily than in the past, with the obvious inclusion of all of the online aspects of the previous game."

Positive reviews and robust sales of *Project Gotham Racing 3* made a sequel inevitable, but the fourth game swapped supercars for eclectic driving conditions. "Weather was an obvious one!" Martyn exclaims. "We'd only really touched on it in the previous games, so to make it a central USP was interesting. Who wouldn't like the idea of taking classic cars out in undrivable conditions! Obviously we had to prioritise the visual aspects, as these were one of the big new attractors for the game, but we really couldn't compromise the gameplay."

This circle was squared by underplaying the realism of racing in or on rain, fog, snow and ice, although an exception was made for the follow-up's test track complex. "Whereas rain conditions might reduce grip by 50% in real life, we would ▶

» [Xbox 360] *Project Gotham Racing 3*'s Gotham Career mode tasks you with competing in groups of city-based events.

» [Xbox 360] The key to unlocking cars and tournaments in *Project Gotham Racing 3* is finishing first.

» [Xbox 360] A major feature in *Project Gotham Racing 4* is its weather, and the driving conditions it creates.

"WEATHER WAS AN OBVIOUS ONE! WE'D ONLY REALLY TOUCHED ON IT IN THE PREVIOUS GAMES, SO TO MAKE IT A CENTRAL USP WAS INTERESTING"
MARTYN CHUDLEY

only actually reduce it by a fraction – then the visuals gave the bulk of the 'seat of the pants' experience of driving on the edge," Martyn reflects. "We reserved the full-on hardcore experience for snow in the Nürburgring, where we had a dedicated 'snowy' track model."

Naturally, new modes were incorporated into *Project Gotham Racing 4,* but one where slow cars tried to evade faster ones had originated in the game's predecessor. "Cat And Mouse was 100% fan-made!" Martyn acknowledges. "People online would make their own races in *PGR3*, so it was an obvious decision to make it 'official' in *PGR4*. I think I first remember one of the Bizarre leads raving about it, at which point we had to see what the fuss was about. I found it fascinating that online players could take a basic set of 'tools' – fast cars and slow cars in this case – and generate new gameplay. That was supposed to be our job!"

Other fresh events of note included Bulldog, which was based on the old playground game of the same name and adapted for expensive sports cars on city streets. "Once again this was based on how the previous game was being used in the online community," Martyn admits. "Basically we were trying to push the game in new directions, particularly looking at how to provide unique multiplayer-focused game content. These were really easy to 'prototype' by just messing around within the game and making up rules."

The other major new element in *Project Gotham Racing 4* was the inclusion of motorbikes, which were added to the game due to a requirement for uniqueness. "Bikes were another obvious choice to add – we didn't want *Project Gotham Racing 4* to be seen as *Project Gotham Racing 3+*," Martyn says. "With both *Project Gotham Racing* and *Project Gotham Racing 3* they were console launch titles. *Project Gotham Racing 2* was a showcase for Live/Online, which is what the series gained its BAFTA for. So with *Project Gotham Racing 4* not being linked to a particular Microsoft launch it needed some stand out points – and bikes stood out!"

But pitting cars against motorbikes came with some challenges, and part of the solution was 'banding' of the sort used in *Project Gotham Racing 2*'s Kudos World Series. "The balancing was obviously a bit of a pain," Martyn concedes, "because bikes and cars have utterly different 'skill sets' – cars can generally corner way quicker than bikes, but bikes have monstrous acceleration. So it was just a case of best matching cars and bikes with similar overall lap times and letting

» [Xbox 360] A series-first for *Project Gotham Racing 4* is its introduction of high-performance motorbikes.

» [Xbox 360] In *Project Gotham Racing 4*'s Cat And Mouse mode luxury sports cars try to obstruct slower vehicles.

them loose! Then obviously we had to balance the amount of Kudos that was earned by various 'moves,' as it's easier to show off on a bike. But that was a whole new ball game!"

Like the previous *Gotham* games, *Project Gotham Racing 4* was a critical and commercial success, but the subsequent sale of Bizarre effectively ended the series. "We had reached a point where we were 170+ employees, and being independent, it was a real problem getting new games signed up," Martyn sighs. "So we decided that we needed to be 'in bed' with a publisher. We had two teams – our 'shooter' team and our 'racing' team. We also had a tech team that served both game teams. We approached Microsoft, and I think it would have been happy for us to get fully on board, but only for the racing and tech teams. So we made the decision to go with Activision, which at the time had the *James Bond* licence and wanted a racing game."

In certain respects, Bizarre's Activision racer *Blur* was a spiritual successor to the *Project Gotham Racing* games, especially in the way that it encouraged player-made modes. "One of the key design goals for Blur was to try to provide as many customisable 'hooks' as we could," Martyn reveals. "This was so players could generate their own multiplayer game modes on dedicated 'servers' with tight rules. Then we would keep an eye on what was becoming popular and promote these. Sadly it didn't really pan out, but I think it was an interesting concept."

Reflecting on the *Project Gotham Racing* series proper, Martyn remembers its development as a positive experience, with perhaps a slight note of regret that he would like addressed if the series was rebooted. "To be honest I've not gone back and revisited the games, but I have extremely fond memories of making and playing them, and I would like to hope they are still just as playable now!" Martyn enthuses. "As for a *Project Gotham Racing 5*, well I think the *Metropolis Street Racer*/*Project Gotham Racing* series prided itself on innovation and bringing new ideas to the racing genre. But nowadays most new stuff has been done, so I think a *Project Gotham Racing 5* could *only* be a proper throwback to its original *Metropolis Street Racer* roots – sod the casual market!"

STAGES OF EVOLUTION:

MULTIPLE MODES

FROM HOT LAPS AND STYLE CHALLENGES TO ELIMINATORS

METROPOLIS STREET RACER

The focus of *Metropolis Street Racer* is its single-player mode, which is split into three sections. Quick Races are custom one-off trials, in Time Attacks you try to beat your best times and Street Racing is a series of events; including Hot Laps, where you have to finish a lap in a set time.

PROJECT GOTHAM RACING 2

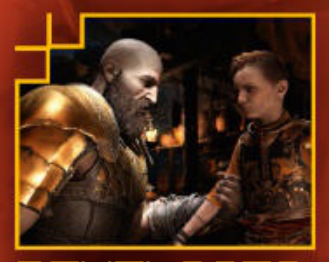
The main attraction in *Project Gotham Racing 2* is its Kudos World Series, which divides its levels into different classes of cars. You unlock new categories and earn new vehicles with Kudos earned in events, which range from setting off speed cameras to various cone-dodging challenges.

PROJECT GOTHAM RACING 3

Project Gotham Racing 3 has a version of Kudos World Series called Gotham Career, but its Playtime mode is more innovative. It introduces Eliminators; where the car in last place is out of the race when a clock hits zero, and Cone Capture; where you win by hitting traffic cones!

IN THE KNOW

- **PUBLISHER:** SONY COMPUTER ENTERTAINMENT
- **DEVELOPER:** SANTA MONICA STUDIO
- **RELEASED:** 2005
- **PLATFORM:** PLAYSTATION 2
- **GENRE:** ACTION



DEVELOPER HIGHLIGHTS

KINETICA
SYSTEM: PLAYSTATION 2
YEAR: 2001

GOD OF WAR III
SYSTEM: PLAYSTATION 3
YEAR: 2010

GOD OF WAR (PICTURED)
SYSTEM: PLAYSTATION 4
YEAR: 2018

THE MAKING OF GOD OF WAR

WITH JUST AN OVERLOOKED FUTURISTIC RACING GAME UNDER ITS BELT, SONY'S SANTA MONICA STUDIO WASN'T A KNOWN ENTITY WHEN IT GOT TO WORK ON GOD OF WAR. LITTLE DID THE TALENTED TEAM KNOW THAT IT WOULD CREATE ONE OF GAMING'S GREATEST SERIES, HEADED BY SONY'S MOST INFAMOUS MASCOT

WORD BY ROBERT ZAK

A GOD IS BORN

IT TOOK A LOT OF ITERATION TO GET TO THE ICONIC KRATOS DESIGN THAT WE KNOW TODAY, AND IT WASN'T ALWAYS PRETTY...

» [PS2] Oh, that giant fire-haired chap smashing entire legions with one swing of his hand? That's your foe, Ares.

» [PS2] Seeing Cronos in the background as you ascend Pandora's temple is a showcase of the game's careful camera framing.

There's a moment in the original *God Of War* that, like an ancient Hellenic pot developing surface cracks over the centuries, wears its age with pride. As you're scaling a cliff up to Pandora's Temple, which is mounted on the back of the Titan Cronos, the camera moves with the deftness of a drone to up above you, looking down. From this perspective, you see how much cliff face you've covered, below that you see the back of the formidable Titan as he crawls across the desert, then far below *that* you see the desert flying by with each of Cronos' titanic steps.

It's a dizzying display of visual layering and camera craft – one of the first wake-up calls that games weren't reliant on pedestals, cranes and helicopters like movie cameras were before the advent of drones. It showed that games could, in their own way, be more cinematic than cinema itself, and *God Of War* asserted that with the authority of a vengeful Greek deity.

Looking back, an action game in the vein of the immensely popular *Devil May Cry* but with a Greek mythological theme seems like a foolproof idea, but it took years of near-cancellations, conceptual struggles and what was unanimously described as a tough development to bring it all together. And all this was achieved at Santa Monica Studio, a studio that until that point had only released a little-known futuristic racing game called *Kinetica* in 2001.

Coming deep into the PS2 life cycle, the game's creative director David Jaffe had a lot of the console's history to look back on and learn from. Of course, there was the Japanese action game influence from *Devil May Cry*, with the flowing crimson coat and enemy-juggling antics of Dante helping to nurture the PS2's teen-edgy image. But David wanted to go further, merging that arcade-like play with something more cinematic. And in 2002 there was no better place to look for inspiration than a videogame tie-in to the great cinematic phenomenon of the time.

> "THAT ROOM WAS OUR PROOF OF CONCEPT, AND PROBABLY A BIG PART OF WHAT GOT US THE GREEN LIGHT"
> DAVID JAFFE

"We had seen [*The Lord Of The Rings*] *The Two Towers* game, which had all this great background interaction that made it feel like you were really living in the space," David tells us. "I think we called them in-game cutscenes or something, sort of storytelling and events occurring in the game. That was a pretty new deal, and a real pain in the ass to get working."

There were only glimmers of this cinematic finesse when *God Of War*, or *Dark Odyssey* as it was known at the time, entered the prototype stage in 2002 – a crucial milestone in convincing Sony's publishing arm that the concept would work. The prototype was, as they often are, rudimentary, showing an armoured soldier swiping through skeletons ▶

DAVID JAFFE

■ David spends most of his time running a self-titled YouTube channel covering the videogames industry. On his daily talk show, *Gabbin & Games* (*G+G*), he discusses big topics in the videogames industry, such as the most influential developer in the medium, and which Nintendo character he'd take to dinner.

STEVE CATERSON

■ Steve currently works as a principle play designer and producer for the toy company Hasbro, working on toys that he can enhance by digitally connecting them. Most recently he developed the companion app for the board game Hero Quest and last year got to work on an electronically controlled Deadpool's head.

TERRY SMITH

■ Beyond his central role in the creation of Kratos, Terry is perhaps equally well-known for his iconic sports paintings and role in growing out IPs for the likes of EA, Activision and Zynga. He's recently returned to his passion of sports paintings, and you can find his work at imaginaryink.net, small-stars.com and terrysmithcreations.com

MASKED KRATOS

■ **The earliest Kratos concepts all involved a masked protagonist, with the possible premise Kratos had to wear a mask as part of his pact with Ares. In the end, it was decided that his face should be visible to give him more personality. Sensible.**

LONE WOLF

■ **One of the more curious Kratos concepts was this one with a baby on his back. David Jaffe said the Japanese manga *Lone Wolf And Cub* was a big inspiration for this short-lived look.**

DREADS

■ **This take on Kratos, with dreads and the darkest complexion of all Kratos', wasn't considered for long, but it did take a step towards making Kratos less armoured with more tribal stylings.**

BLUE

■ **What's white and blue? Why, the Greek flag! That was the thinking behind blue-and-white Kratos before they switched to red. In fairness, that flag appeared in the 19th century, some 1,400 years after Kratos' time.**

RED

■ **The Kratos we know, love and warily admire today.**

» [PS2] Fighting several heads of a hydra that's tearing apart a Greek war fleet was one hell of an opening.

» [PS2] *God Of War* was a big proponent of quick-time events, so expect to press O to throat-stab a lot of minotaurs.

KRATOS' CRATE OF IMMORTAL TRICKS

YOU DON'T GO GOD-TOPPLING WITHOUT SOME SERIOUS GEAR

ZEUS' FURY
■ This power-up allows you to chuck bolts of lightning at enemies – *especially* those pesky skeleton archers.

ARMY OF HADES
■ Any attack that involves summoning the spirits of the dead to destroy your enemies becomes an instant favourite here at Retro Gamer.

POSEIDON'S RAGE
■ Jump up into the air and summon a circle of lightning all around you. Feels like it could be a great decompression exercise after a week's work.

MEDUSA'S GAZE
■ With this useful ability, you can turn your enemies to stone, though never quite for long enough to feel worth it.

FIERY CHAINS
■ The chains binding Kratos' arms to his swords glow, helping you keep track of him on-screen and giving his attacks some of that fire power pizazz.

BADASS GREEK SYMBOLS
■ In a bid to make Kratos look more 'Greek', Santa Monica Studios emblazoned the Greek Key symbol onto his loincloth… and his flesh.

BLADES OF CHAOS
■ Kratos dabbles with a lot of weaponry, but these blades, chained to his arms when he pledged his life to the god of war Ares, remain the go-to.

"THE GREEK TRAGEDY WAS STILL THERE, BUT IT WAS A TRAGEDY THAT ANGERED THE LEAD CHARACTER AND SERVED AS HIS MOTIVATION"
TERRY SMITH

▶ with simple sword swings around various low-textured levels. Only the final room of the prototype – a dungeon with polished reflective floors and rays of light dappling in through the ceiling – was built to the quality level of the final game. "That room was our proof of concept of how we wanted every section of the game to look, and probably a big part of what got us the green light," says David. "In the back of our minds we were like, 'Yeah but how in the hell are we going to get all of the levels looking as good as that.'"

Not long after the prototypes, with the game progressing under a 'Greek Mythology meets *Heavy Metal* magazine' ethos, one of what David Jaffe describes as the "unsung heroes" of *God Of War*'s development, art director Terry Smith, joined the game. The game's concept was struggling at the time, so Terry spent time with David talking about what inspired him while they perused the comic-book stores of LA.

From these talks, a loose 'horror version of *Jason And The Argonauts*' emerged. "It kind of clicked with David but it also clicked with the team, giving us a philosophy to build the project from," Terry explains. "So all the characters, all the bosses, that kind of stuff, spin off of that".

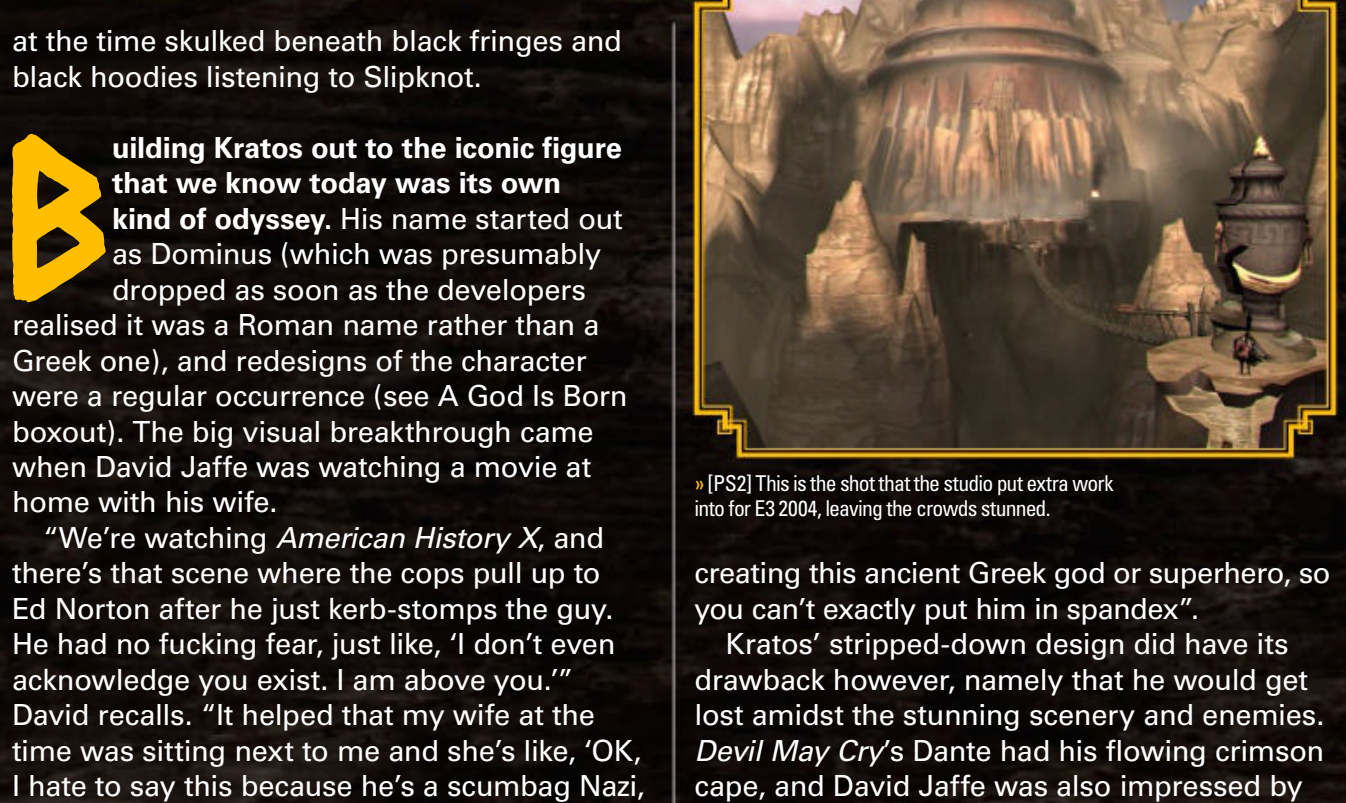
Of course, *God Of War* is hardly a horror game, but its imagery was far more hellish

» [PS2] Reflections like these are a product of technical wizardry and five years of PS2 tech to learn from.

than the gleaming mythology many of us grew up with, or that seen in Renaissance art where the imagery was often used to represent idealised Christian values. The creatures were hideous, humans were little more than sacks of meat to be torn apart, and Hades wasn't just another beardy bloke as previously depicted, but a pig-faced monster more akin to a Christian demon.

Underlying Kratos' Tarantino-esque revenge tale is a Greek tragedy, which follows the Spartan general who, in a bid to save his own skin, enters a pact with the god of war Ares. These types of deals rarely go well, and in this case led our hubristic hero to slaying his own family, becoming forever bleached with their ashes, and running all kinds of unsavoury errands for the gods.

But instead of wallowing in his gods-forsaken plight or succumbing to a morality tale like so many Greek heroes before him, Kratos channelled it into unadulterated rage. "It kind of humanised the god-like experience," says Terry. "The Greek tragedy was still there, but it was a tragedy that angered the lead character and served as his motivation." It's an angsty premise that spoke to those of us who



» [PS2] The glowing trails surrounding Kratos' chains make for some spectacular light shows.

at the time skulked beneath black fringes and black hoodies listening to Slipknot.

Building Kratos out to the iconic figure that we know today was its own kind of odyssey. His name started out as Dominus (which was presumably dropped as soon as the developers realised it was a Roman name rather than a Greek one), and redesigns of the character were a regular occurrence (see A God Is Born boxout). The big visual breakthrough came when David Jaffe was watching a movie at home with his wife.

"We're watching *American History X*, and there's that scene where the cops pull up to Ed Norton after he just kerb-stomps the guy. He had no fucking fear, just like, 'I don't even acknowledge you exist. I am above you.'" David recalls. "It helped that my wife at the time was sitting next to me and she's like, 'OK, I hate to say this because he's a scumbag Nazi, but he's fucking *hot* in this movie.'"

The epiphany about the rawness of a bald-headed protagonist wearing virtually nothing was soon integrated into Kratos' design. His Spartan armour was stripped away, leaving him wearing little more than a loincloth. In response to complaints that he didn't look 'Greek' enough, Terry Smith and artist Charlie Wen worked up a design around the Greek Key motif; a popular border design consisting of a repeated sharp-angled meandering pattern (which, just to bookend Kratos' Nazi connection, happens to look very similar to the Hindu swastika motif). The pattern is not only visible on Kratos' loincloth, but is also the basis for Kratos' iconic tattoo, which starts on his face then wraps seamlessly around his entire body. "This is also something that you would see in a comic-book hero," says Terry. "But you're

» [PS2] This is the shot that the studio put extra work into for E3 2004, leaving the crowds stunned.

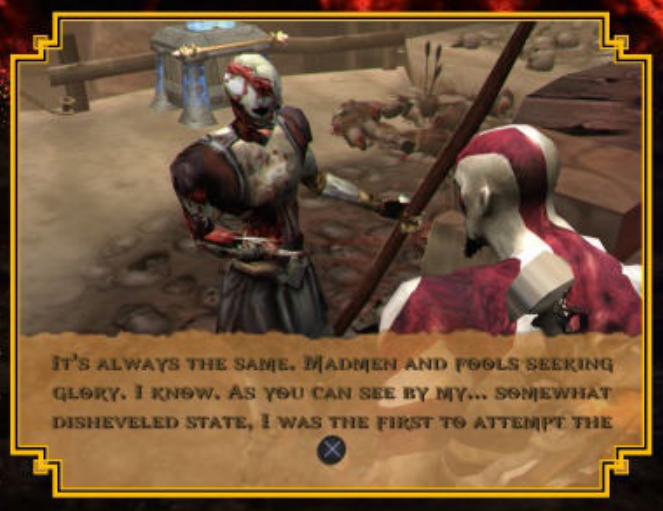
creating this ancient Greek god or superhero, so you can't exactly put him in spandex".

Kratos' stripped-down design did have its drawback however, namely that he would get lost amidst the stunning scenery and enemies. *Devil May Cry*'s Dante had his flowing crimson cape, and David Jaffe was also impressed by the inconveniently long scarf of the hero of the PS2 version of *Shinobi*. Kratos needed his own equivalent gimmick.

The flash of inspiration came from Jo Wright, who thought of using the chains tethering Kratos' swords to his arms. "She started explaining how we could put particles on them and light them up and swing them around," says David. "So wherever you were you would always see the chains, and the weapons gave way to that. It's a testament to how so many of the things in the game at a narrative level, like Kratos' white skin and the Blades Of Chaos, came about first from pure gameplay and art reasons."

In a game of such high cinematic ambition, certain compromises had to be made. In the prototype, we see the hero flying around with wings (inspired by the myth of Icarus) – an ▶

» [PS2] Fighting overly persistent enemies on ropes and walls was one of the game's lesser pleasures.


It's always the same. Madmen and fools seeking glory. I know. As you can see by my... somewhat disheveled state, I was the first to attempt the

» [PS2] This janitor-cremator at Pandora's Temple is refreshingly disinterested and deadpan compared to the rest of the cast.

» [PS2] For all its cinematics, *God Of War* was still partial to the odd silly boulder dash.

» [PS2] Not sure how the real Hades would feel about this demonic interpretation of him

idea that David ruefully said had to be left on the cutting room floor. Art director Steve Caterson also recalls David wanting Kratos' blades to sear or 'bite' into his flesh when they were sheathed. "We spent months trying to figure out how to make that actually happen in the game. We could do it, but we could never do it in a way that was worth the bang for the buck," says Steve. "So I would go back and say, 'Hey, we can spend two months doing that or two months making the fire effects on the blades look bigger and more robust. Which do you want?'"

The fire effects won, giving rise to the distinctive glow of the Blades Of Chaos that imbued each of Kratos' vicious attacks with glorious ember trails, causing him to swirl around and slash his enemies with the elegance of a ballet dancer in a blade frenzy.

For a while however, the team couldn't figure out why Kratos' attacks lacked a sense of impact on enemies. A breakthrough came when combat designer Eric Williams pointed out that it's all in the colour palette of the enemies. "They were just too detailed in their texture maps," says David. "So Eric said that we really only want to focus on three colours: the main colour, a secondary and barely sort of a third colour. Suddenly we started building characters that way and you could actually read them, see their hit animations and moves better."

> "THERE WERE A LOT OF PEOPLE THAT COULDN'T WORK UNDER THOSE CONDITIONS, BUT THE PEOPLE THAT COULD WORK UNDER IT GOT REALLY, REALLY GOOD"
> STEVE CATERSON

Despite the development team being made up of what David and Steve call some of the greatest talents they've worked with, the threat of *God Of War* being cancelled hung over much of the development. It was only once the game was revealed to an awe-struck public at E3 2004 that it became clear they were onto something special.

Aware that E3 would be a critical crossroads in the game's journey, Terry Smith decided to refine one of the scenes that would be in the demo with some of that cinematic flair the game would become renowned for. It's the scene where Kratos is running over a long bridge towards the Temple Of Pandora. "When he starts running, we're with him and he's running towards this beautiful matte painting of the temple [created by Charlie Wen]," Terry tells us. "Then the camera starts to fall, then it stops, and it actually starts moving backwards, then once he's really far away we cut to him when he gets there."

It's an incredible moment, amplified by the bombastic orchestral music that perfectly punctuates every camera movement and cut. There's a case to be made that this was not only the moment that secured the game's future, but also the moment that showed the world that there was still plenty of life and untapped power left in the ageing PlayStation 2, which would go on to be produced until 2013.

God Of War's moody comic-book bastardisation of Greek mythology can have the effect of colouring our memory, making us recall it as aesthetically gritty as the clenched teeth of its anti-hero. But in fact the game's colour palette was deceptively vibrant, thanks to an artistic approach inspired by fantasy paintings and Pixar movies, of all things. "My direction was that you have to paint warm and cool and not light and dark, which meant that the shadows don't get black – you use purples and blues instead," says

DARK ODYSSEY

UNBEKNOWNST TO ITS MAKERS, GOD OF WAR WAS THE START OF A SAGA THAT WOULD STAND THE TEST OF TIME

GOD OF WAR II

FORMAT: PLAYSTATION 2
YEAR: 2007

■ Even though this entry came out on PS2 after the launch of the PS3, it was arguably more impressive than any of the early next-gen games. Somehow bigger and more majestic than the original, it marks the beginning of Kratos' vendetta against the gods following their betrayal (though in fairness, Kratos was being a complete sulky brat).

GOD OF WAR: BETRAYAL

FORMAT: MOBILE
YEAR: 2007

■ Perhaps IGN got carried away when it called this "the real deal third game in the killer franchise", but given it was a Java game designed for limited phones, this 2D beat-'em-up was impressive. The fact that all your progress could be lost the moment someone tried to call you was a surefire way to build up resentment towards your friends.

GOD OF WAR: CHAINS OF OLYMPUS

FORMAT: PSP
YEAR: 200X

■ *Chains Of Olympus* sees Kratos coaxed into helping the sun god Helios escape his pickle with the titan Atlas. In Helios' absence, the god of dreams Morpheus seizes the opportunity to send much of the world to sleep, though you never come face to face with the enigmatic antagonist.

GOD OF WAR III

FORMAT: PLAYSTATION 3
YEAR: 2010

■ Kratos' first outing on PS3 was such an explosion of deity-destroying ultra-violence that there was really little left for Kratos to do in Greece by the end of it (which probably explains why the next game in the chronology saw him flee for the frigid climes of Scandinavia). It was also quite possibly the most visually jaw-dropping of its generation.

» [PS2] Ares doesn't get a ton of screen time, but you won't forget that fiery mane in a hurry.

Terry. "It was about getting the artists to think more 'fantasy' than realism."

Following the audible gasps at E3 at some of the demo's panoramic views (as well as the feral brutality with which Kratos tore up his foes), development doubled down on making sure the camera was moved and positioned in a way that maximised every shot. At a time when games tended to give players full camera control so they could explore every corner of their 3D worlds, *God Of War* went against the grain.

The directed precision of each shot, cut and camera pan in *God Of War* meant that none of the PS2's technical resources were wasted. "Everybody else was building out these entire worlds where people could spin their camera all the way around and see everything, but by controlling the camera we could do more with the polygon counts and get more creative," Terry remembers. "We could be more calculating with what players saw, so we were able to create more of a compelling story and narrative because it was like going to a good movie."

All this hard work and ingenuity came at a cost however. The development of *God Of War* burned through art directors before arriving at Steve Caterson, who says that crunch was unavoidable on a production of that scale. "We worked long hours, we hated crunch time, but when you get creatives getting in the flow and doing 'that one little last thing', it snowballs because touching something moves something for the next person, and the person after that and the person after that," he tells us. "There were a lot of people that couldn't work under those conditions, but the people that could work under it got really, really good."

» [PS2] The agile Satyrs are a late-game enemy, and make excellent duelling opponents.

David Jaffe agrees that development was tough, with tempers often flaring and work going far beyond sensible hours. "The fact is when you are aiming to do something new and big and different that doesn't come with a nine to five schedule and it doesn't come with a road map," he says. "And that's not for everyone. It should be made clear to workers when they get hired that this is the kind of culture the studio has. But in our case, that's who we were. We wanted to be the best."

God Of War emerged from its gruelling, fiery development in March 2005. It earned critical acclaim and introduced Kratos to the world, birthing a new Sony icon who would be the scowling face emblazoned onto its console branding across the generations. His recent reimagining as a weary father with a dark past illustrates Santa Monica Studios' enduring creativity in evolving gaming's most misanthropic anti-hero, but not before he left a pantheon-load of destruction in his wake. ✱

GOD OF WAR: GHOST OF SPARTA

FORMAT: PSP
YEAR: 2010

■ Released for PSP on the same day as *God Of War III*, *Ghost Of Sparta* is perhaps a vital counterpoint to Kratos' sociopathic PS3 debut. It introduces Kratos' brother Deimos and their inevitably complicated relationship, as well as bringing Kratos face to face with his child self.

GOD OF WAR: ASCENSION

FORMAT: PLAYSTATION 3
YEAR: 2013

■ Probably the most overlooked outing in the series, *Ascension* was scoffed at for its multiplayer mode (which was actually quite good fun). It remained a tour de force, with some mind-blowing boss battles and a story set even before the events of the original game, giving some perspective on why our boy Kratos is such a grump.

GOD OF WAR

FORMAT: PLAYSTATION 4
YEAR: 2018

■ Older, wiser, and with a mighty beard and son to care for, the Kratos of the last outing marked a vast shift in direction for the series. The camera is over the shoulder, combat is tight and tough, and crucially the action takes place in Norse mythology, telling a surprisingly touching story from one of gaming's historic bad boys.

GOD OF WAR: RAGNARÖK

FORMAT: PLAYSTATION 4
YEAR: 2022

■ This year, Kratos and his son Atreus will continue their Nordic quest, trying to get to the bottom of a prophecy that foretells the impending Norse apocalypse of Ragnarök, and Atreus' role in these events. In their journey across the nine realms, the pair will clash with Freya and Thor, as well as running into Norse mythology's own god of war Týr.

David Lubar

What cherished games would you take to the island?

Whether he's writing books or coding games, David Lubar knows how to entertain an audience. Join us on his Fantastic Voyage

Words by Paul Drury

Once upon a time, there was a little boy from New Jersey who dreamed of being an author. He spent many hours writing stories about aliens and werewolves and all types of fantastic creatures but no one seemed to want to publish them. Then he noticed a thing called a 'computer' which could play 'games' and he realised that people who played 'computer games' seemed to like aliens and werewolves and fantastic creatures, so he tried that instead. Is this story sounding familiar, we ask our castaway?

"I'd swap 'little boy' for 'college graduate', but otherwise, yeah," grins David Lubar. "I always wanted to be a writer but I was also a science nerd. I thought I was going to be a chemist until I got to college and took chemistry. Then I fell in love with philosophy and that got me into logic. I studied that for four years because everyone wants to hire a logician…"

Recognising this particular career path was more of a cul-de-sac, David did indeed try his hand at writing and after several years, finally, in the late-Seventies, sold a story – to a computing magazine. *Creative Computing*, founded in 1974 by David H Ahl, a pioneer of the early computing scene, published fiction alongside tech pieces, coding tutorials and game reviews.

David of course picked up the magazine his work appeared in and read with wide-eyed astonishment about the burgeoning world of games software. He'd long been a fan of board games but was also something of a loner, so his purchase of *Dungeons & Dragons* a few years earlier had been a mistake. "Now I thought, 'Hey, maybe the computer can be the other players?,'" recalls David. "I looked at these game listings in the magazine, and even though I'd never done any coding at college, I became obsessed with writing game programs, even before I actually had a computer."

Eventually David got to see if his pencilled code actually worked when he bought an Apple II in 1978, "for $1200 when a car cost $5,000", he adds. He began learning Assembly language and in 1980, landed an associate editor job on the aforementioned *Creative Computing*, to which he'd continued to submit occasional articles.

"We tried very hard to be a generalist magazine," explains David. "We'd cover popular machines like the TRS-80, the Apple, the Commodore and even arcade games. I actually ended up writing a book, *The Creative Computing Guide To Videogames*, about mastering *Donkey Kong* and various other arcade games… and it's the worst thing I've ever written. Total garbage. I still have a stack of them I'm going to leave as my legacy. I wish I'd used a pseudonym."

David continued programming throughout his time on the magazine and got to know Mark Pelczarski at Penguin Software. He ended up contributing code to its popular release, The Complete Graphics System, a package used to create visuals for a wide range of games from *Troll's Tale* to *Charlie Brown's ABC*, and you often see him credited on titles created using the tool. So when Mark was contacted by Sirius Software, asking if he could recommend any talented programmers, naturally he suggested David.

"Sirius were starting a group to make games for the Atari VCS in 1982, because, hey, what could go wrong?" he chuckles. "I got a call from Larry Miller [coder of *Enduro* and *Epoch*] who asked if I wanted to come out to California and make games. I didn't know who he was but I talked to my wife and ended up flying out to meet them. I wore a jacket and tie, which almost lost me the job – and any respect."

David was hired for the tidy sum of $40K, quite the step up from the $12K he was bringing in at the magazine, and he and his wife moved from the east coast to the west. Together with four other new hires, including Mark Turmell, who would go on to make a name for himself with games like *NBA Jam* and *Smash TV*, David was installed in an office and given a free hand to make any game he fancied. His first effort was inspired by a desire to avoid the flickering black lines you may have noticed on many Atari 2600 titles, a by-product of the console's fine positioning register, which ▶

David still has the jogging suit Activision gave to all its employees to promote Decathlon. "The year before I was hired, each employee got luggage and a trip to Hawaii," remembers David. "Timing has never been my strength."

Trivia

David's first boss, David H Ahl, made sure all the chairs in his office were smaller than his own. It's a business psychology thing, apparently.

FIRST JOB
Camp counsellor

CURRENT JOB
Problem solver

FAVOURITE FILM
Jason And The Argonauts

FAVOURITE ALBUM
Rockisdead by Dorothy

FAVOURITE BOOK:
American Heritage Dictionary

FIRST COMPUTER/CONSOLE
Apple II

FAVOURITE COMPUTER/CONSOLE
PSP

BESTSELLING PRODUCT:
Frogger (Game Boy)

BEST HOLIDAY
New Orleans

WHO YOU WANT TO BE STRANDED WITH
MacGyver

212-068105103032068117103

SEX
M

NAME
David Lubar

YEAR OF BIRTH
1954

PLACE OF BIRTH
Morristown, New Jersey

BIOGRAPHY

David began coding Atari 2600 games for Sirius in the early Eighties and went on to work for Activision, Absolute and Majesco.

"I became obsessed with writing game programs, even before I actually had a computer"
David Lubar

got him wondering if he could animate an object without using any fine positioning. "My solution was an inchworm," he grins. "It looks like it's moving [smoothly] but really it's doing a coarse jump… the whole of *Worm War I* grew from that one technical trick. And I didn't have enough memory for explosions so I just looked around in the code to find a chunk that would look like an explosion if it was treated as graphics data…"

Ignoring the terrible pun, *Worm War I* is a clever little scrolling shooter. The undulating annelids you must blast crawl hypnotically and the game offers co-op or competitive options for two players, quite forward thinking for the time. He followed this up with *Fantastic Voyage*, based on the 1966 film, which tasked you with guiding your microscopic ship through veins and arteries, destroying evil enzymes on your way to a boss battle with a blood clot. "No one really had an idea that a movie licence was worth anything back then," smiles David. "Sirius did a deal with Fox Games, which was part of 20th Century Fox, and we could use any of their films for a game. Being a science fiction nerd, *Fantastic Voyage* was a no-brainer. In fact, sometimes they let us watch their movies before they came out to see if we wanted to make a game out of them. I remember seeing *The Entity*, which is basically Barbara Hershey being raped by an invisible demon for 90 minutes. We said we'd pass on that."

David settled on a more suitable property with *Flash Gordon*. Released in 1983, the game is testament to his growing confidence with the hardware, featuring a map below and some frenzied firefights above. He followed this up with *SpaceMaster X-7*, again based on a science fiction B-movie, which riffs on Cinematronics' *Star Castle*. "My motivation for doing *SpaceMaster* was to get a vector look on the Atari. A lot of my games come from me messing around, seeing if I can get the computer to do something different. I was just learning more and more about what the machine could do and how to exploit it."

> "I actually ended up making more money that year because I am quick"
> David Lubar

Yet just as David was mastering the intricacies of the 2600, Sirius was going bust, hit hard by the infamous videogame crash of 1983. Fortunately, Activision approached David and several of his fellow coders at Sirius and offered them jobs, opening up an office for them in Sacramento. The group was to produce games for home computers rather than consoles, specifically the C64 and the Atari 800, and David began work on *Pastfinder* for the latter. Did the far greater power of the machine really allow your imagination to run free, David?

"Oh I loved it," he says. "One of the most powerful things the machine has was collision registers. Not only could you detect when one object had collided with another, it could tell you which colours had made contact, and that allowed me to do *Pastfinder*, because I could work out when the ship's shadow was in collision with the shadow of a mountain, and so I'd know if you were jumping over it and not crashing into it! I try not to be too impressed with myself, because most people aren't, but that was an elegant solution."

Pastfinder, with its combination of exploration and strategic blasting, proved a hit, and was converted to the C64 and MSX. Activision, though, was going through some financial issues of its own and ended up laying off David and his colleagues in 1984, though in lieu of any severance payment, it did offer him work porting some of its popular titles. "I actually ended up making more money that year because I am quick," he says, with boyish pride. "I did conversions of *Master Of The Lamps*, which I thought was clever and fun, and I also did *Hacker*, which I wasn't so keen on because it was too easy to make a mistake and have to start over. I've never liked that philosophy of 'be perfect or die' in games. I guess I'm just not a roguelike…"

Having handled many ports in the mid-Eighties, from *Murder On The Mississippi* to *Ultima IV*, David moved back

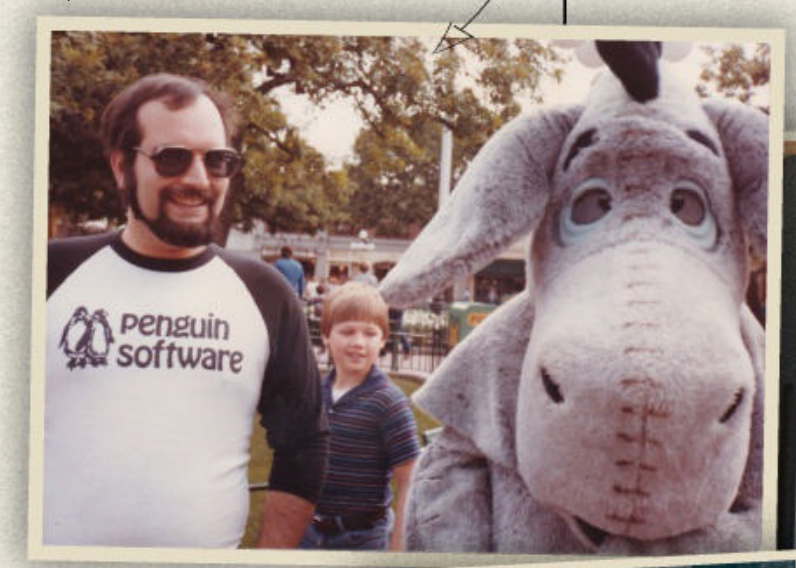
Praise For David

Here's what **Retro Gamer** has to say about David Lubar's work...

Darran Jones
I've played David's version of *Frogger* on the Game Boy and I recall it being very good. So good in fact that it's one of the titles I'm looking for at the moment. I also love *River Raid II*, so it's great to hear that David was just as big a fan of the first game as I was.

Paul Drury
Affable, witty, prolific… chatting to David was a real pleasure. He regaled me with tales of his two decades in the games industry well into the night and at the end, I asked if he wanted to plug his latest book. He laughed and said he "gave zero fucks about self-promotion". So I'm doing it for him – visit www.davelubar.com

If you're a coder and familiar with the Boolean operation Exclusive Or, you'll find this photo of David and Eeyore hilarious, you beautiful nerd.



David with a moustache, left-handed guitar and his bluegrass band. The bass player was Eric J Johnson, author of The Elements Of Choice: Why What We Decide Matters.

The prototype EPROM of David's very first Atari 2600 game, Worm War I.

Timeline

1982

WORM WAR I
■ **Year:** 1982
■ **Format:** Atari 2600
David's debut on the notoriously tough to code for console is a decent little shooter, featuring some technical trickery to make those worms really wiggle.

1983

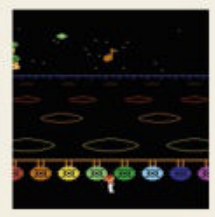
FLASH GORDON
■ **Year:** 1983
■ **Format:** Atari 2600
This shows how David's coding skills had developed in just a year. Blast baddies, rescue spacemen and keep an eye on the map for incoming threats.

1984

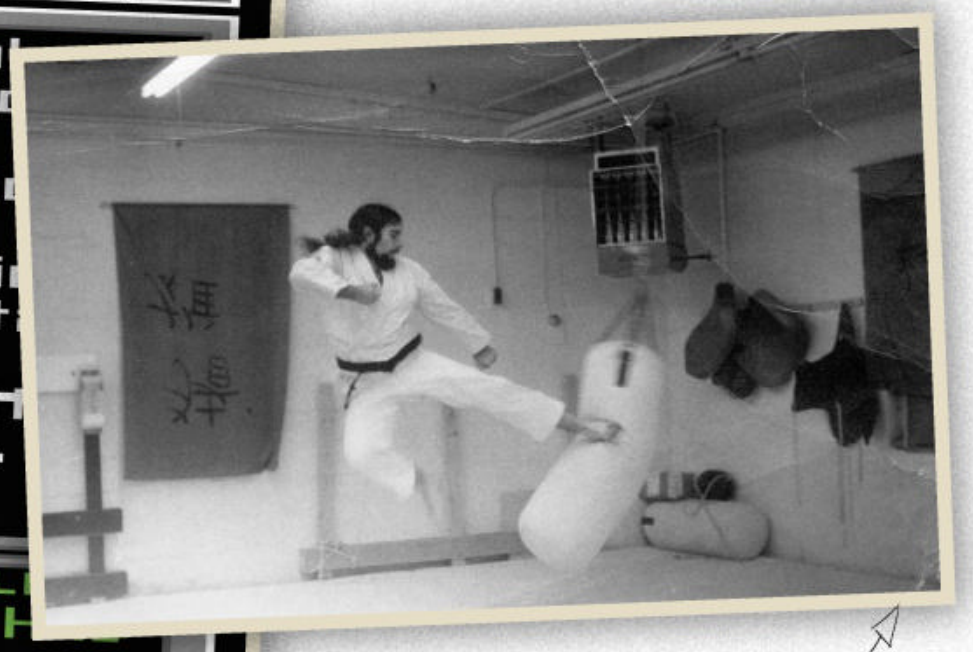
PASTFINDER
■ **Year:** 1984
■ **Format:** Atari 800
Our favourite of David's early games, this is an impressive shoot-'em-up, which requires deft navigation of your insect-like ship as well as raw firepower.

1985

MASTER OF THE LAMPS
■ **Year:**1985
■ **Format:** Atari 800
David handled many conversions in the Eighties, for Activision, Origin and others. We've picked this unusual music-based game to showcase his programming prowess.



[C64] Did you ever answer that elusive question: Where In Time Is Carmen Sandiego? David can but then he handled the C64 port.



David, aged 18, at a karate school in his hometown of Morristown, New Jersey, performing his live action version of IK+.

Fear and Coding

If you are not aware of *Creative Computing*, which ran from 1974 to 1985, you can read many back issues at archive.org and in the January 1982 issue, you'll find Adventures In Videoland, which chronicles David's efforts to write *Rollercoaster*, an Apple II adventure game which interfaced with a Philips LaserDisc player to provide cutscenes. This was a full year before *Dragon's Lair* announced the groundbreaking technology to the world, meaning David has a legitimate claim to coding the first LaserDisc title. "I appreciate that but it was just a coding task handed to me by my boss," he says, modestly. "I wrote the article in the style of Hunter S Thompson because I really wanted to be like him or James Joyce. My liver couldn't handle either."

to the east coast with his wife and young daughter, and continued to take on freelance work. While contracting for Activision, he'd met one of their star programmers, Garry Kitchen, who now had his own company, Absolute Entertainment, which still did work for its old employer. "Activision wanted a sequel to *River Raid* and I was like, 'Yeah!' I'd met Carol Shaw, who'd done the original game, and she was just brilliant. I still don't really understand how she managed to generate the ground for *River Raid*… and I've seen her code. It's a polynomial, apparently, though I think it's magic or voodoo or something."

Released in 1988, quite late in the life of the 2600, David's *River Raid II* introduces some interesting ideas such as being able to alter your altitude, allowing your plane to swoop into combat or soar away from danger. He continued to make games for Absolute right into the mid-Nineties, coding from the comfort of his home in Pennsylvania and just occasionally braving the trip to the office in New Jersey. In those days before superfast broadband, most of his programming would be sent to HQ not via a modem but a floppy disk delivered by FedEx. "You really, really don't want a bug in that," he quips.

As the new decade dawned, David found himself mainly coding for Nintendo consoles, notably the Game Boy, and is especially fond of his work on *Home Alone*. "I think I'm the first person to put Macaulay Culkin on a game screen," he smiles, amused by this dubious claim to fame. "That game was a fun challenge. I was told I could use the base code from David Crane's *A Boy And His Blob*, but it didn't allow for very many distinct rooms, so rather than doing an image of a room, I defined each room by its furniture. Each piece had an identity number and an X-Y coordinate and a number for the wallpaper and carpet… that let me create many different rooms without having to create thousands of images."

Lubar on Lubar

David picks his three favourite projects

FROGGER 2
"I got to do some software tricks to make the system do cool things like the double-plane scrolling and really big moving objects."

WORM WAR I
"My first console game. I learned a lot working under the tight restrictions of the system."

BUMPER BASH
"I grew up playing pinball. When I was a kid, I wanted to become a pinball designer. This was a nice way to fulfil that wish and to make something different."

1985

RIVER RAID II
■ **Year:** 1988
■ **Format:** Atari 2600
David credits Dan Kitchen as being heavily involved in the design of this sequel and it does add many new features to the beloved original, some interesting, some distracting.

1991

HOME ALONE
■ **Year:** 1991
■ **Format:** Game Boy/SNES
It's a perverse source of pride for David that he can claim to be the first person to put young Culkin in a game – and it's a pretty decent flick-screen adventure, too.

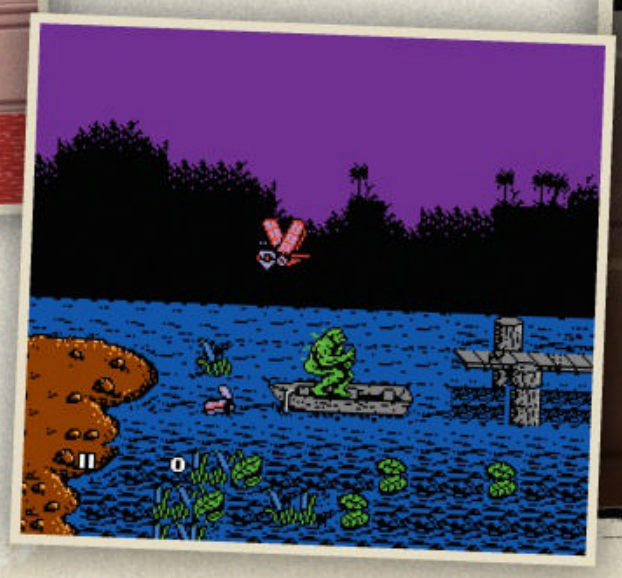
1999

FROGGER
■ **Year:** 1999
■ **Format:** Game Boy/SNES
Along with *Super Breakout*, Dan Kitchen contracted David to produce a version of Konami's arcade classic and it shifted an incredible 5 million units, says Dan.

2000

FROGGER 2
■ **Year:** 2000
■ **Format:** Game Boy Color
Problems with the rights to the *Frogger* name meant David's final game had a limited release, which is a real pity as he expanded the concept with a lot of interesting ideas.

[SNES] David showcased his interior design skills as well as his coding nous for *Home Alone*.



David still keeps in touch with his first loves...

Readers' Questions

Merman: Who was your favourite programmer/designer to work with?
That's easy – Rick Booth. I like to think I'm pretty smart but there are a few people who have totally blown me away and Rick was so amazing at programming. He wrote a book called *Inner Loops* and it was so brilliant, Intel used it in their training.

Rossi46: Were you familiar with the *Swamp Thing* canon before making the game?
I knew the movie based on *Swamp Thing*, but I doubt I was familiar with the comic series, so I really didn't know the canon. By the way, the game that was released was not my design. I started with a very different concept, where the game required the player to solve environmental puzzles by using Swamp Thing's abilities, but the company brought in a designer who basically turned it into a platformer. I later heard that it was extremely difficult to play. I take full responsibility for that. I guess the game was tuned too much for my own sense of timing.

FGasking: Have you worked on any unreleased games?
I can think of at least three. At Sirius, I was working on an Atari 800 game called *Cineman*, about a bird doing stunts in a movie. That was nearly finished but everything was collapsing around me at the time. I was also working on a game based on the TV show *M*A*S*H. Unbeknownst to us, Fox had asked several developers to work on [the licence] and mine wasn't picked. My development disks for that I donated to the Videogame Museum in Texas. At Absolute, I was working on a *Simpsons* game for the Game Boy which used a spilt-screen but no one liked that idea!**

Dan Kitchen: Do you still play bluegrass?
[Laughs] I've never been very good. I think it's the Dunning-Kruger effect, that I thought I could play the guitar. I do still listen to bluegrass and I enjoy it.

TT: We hear you're a big pinball fan. Any favourite tables?
Bally's *Flip Flop*. That was in the student centre at Rutgers and I could run up 25 free games. And *Abracadabra, El Dorado, Xenon, Eight Ball Deluxe*... so many great tables.

"I think I'm the first person to put Macaulay Culkin on a game screen"
David Lubar

The flick-screen adventure, puzzle-packed and with a bouncy tune to boot, was a source of pride for David because he had a major role in its creation. As game development teams grew larger and larger and budgets swelled, he was increasingly finding himself a minor player in the greater whole: for a *Simpsons* title, he was tasked with just handling the volcanoes and his sole contribution to *Home Improvement* on the SNES was to animate a single ant. After having complete control over his game projects less than a decade earlier, it was not a change he embraced.

"It eased my transition out of the industry," says David. "The first thing that changed was art and that made sense because not every programmer is a good artist. It was great when people started giving you graphics that actually looked like the thing they were supposed to be. Then they brought in musicians and that made sense, too. Then they brought in managers and everything went to hell. People that have never played a game, never designed a game, never even managed a project… that struck my 'I don't play nice with others' bone."

David returned to writing full-time in 1995 and has had over 50 books published since then, ranging from short story collections such as *Kidzilla And The Witch's Monkey*, to his recent novel, *Character, Driven*. He was tempted back into the games business one last time at the end of the Nineties by his old colleague at Absolute, Dan Kitchen, who needed someone to convert *Frogger* and *Super Breakout* to the Game Boy. What lured you back, David?

"Money," he replies. "OK, that's a little too glib but the money was good, mostly because I was quick. I do love programming and the Game Boy is a lot of fun to code for. *Frogger* is so iconic, so the chance to do a sequel was even better than doing *River Raid II*. No, I never received any code [from the original titles] but if you're told to convert something like *Super Breakout* to a handheld, you can see what they want. They're not asking for *Tekken*."

The ports were well-received and sold in their millions, which was a little annoying as David had been paid a flat fee for his work. Their success, however, did result in him being asked to produce *Frogger 2* for the Game Boy Color and he really expanded the concept, introducing multi-directional scrolling, puzzles elements, varied levels and big, chunky sprites. And this time, he got a royalty deal. "That was great, except Majesco had done it for Hasbro, and after it was published, it turned out that Hasbro didn't have the rights to *Frogger*. It got pulled off the market and I only received one royalty payment."

Developing videogames and writing books can be full of such disappointments but that degree in philosophy seems to have come in very useful as David talks stoically about all the highs and lows of his long and prolific career in both fields. He can switch instantly from explaining the technical trickery involved in fooling the Atari 800's colour registers to the epiphany that led to his book, *Punished*, a tale of an unfortunate boy cursed to only speak in puns. We wonder if he has ever considered combining his two talents and making a game based on one of his books?

"That's an excellent question and a tough one," he muses. "*My Rotten Life*, a story I wrote about a kid who starts turning into a zombie, might work. I have sometimes thought about getting some kind of development system, or maybe writing text for a game, but then the good thing about writing books is they don't have bugs. You don't get calls from your publisher at 2am saying, 'Someone went from page seven back to page five and your book exploded.'"

Trivia

David often includes videogame references in his books and his successful *Weener* series includes at least one game-based story in every collection.

David's Desert Island Disks

The games that David simply couldn't live without

01 Jeanne d'Arc (PSP)
This is the game that got me hooked on strategy role-playing games. I went from here to the *Disgaea* SRPGs, and several others. I love that you can take your time and test out your move before committing to it.

02 Call Of Duty: Modern Warfare 2 (PS3)
I picked this for the amazing co-op Spec Ops missions. They are endlessly replayable and require a lot of teamwork. I assume I can bring a friend to the island? [Ed – No, but you can train a monkey]

03 Pokémon Go (ANDROID)
No explanation necessary. No apology.

04 Forza Horizon 4 (XBOX ONE)
I'm generally playing two or three games at a time, mostly driving, first-person shooters and action adventures. This grabbed me hard. I think I played it almost exclusively for many months. Great driving feel, like *Burnout Paradise* and all the *Need For Speed* games done by Criterion. And you could be reckless without getting totalled.

05 Ratchet & Clank (PS2)
Loved it. Great gameplay. Excellent design. Powering up and evolving the weapons was so much fun. And a wave to *Sly Cooper*, which I loved, too, and which played similarly.

06 Baldur's Gate: Dark Alliance (PS2)
I have great memories of playing this with my daughter. I'm a big fan of co-operative dungeon crawling, and this one was perfect for it, as long as I remembered that ALL the dropped gold was hers.

07 Tetris (GAME BOY)
I admire the brilliant simplicity of the design. It's fun, challenging and compelling.

08 Lode Runner (APPLE II)
Such a clever design. Simple on the surface, but it could be very challenging. Most importantly, it was lots of fun to play.

Kirby: Power Paintbrush

IT'S GOOD TO TOUCH

» RETROREVIVAL

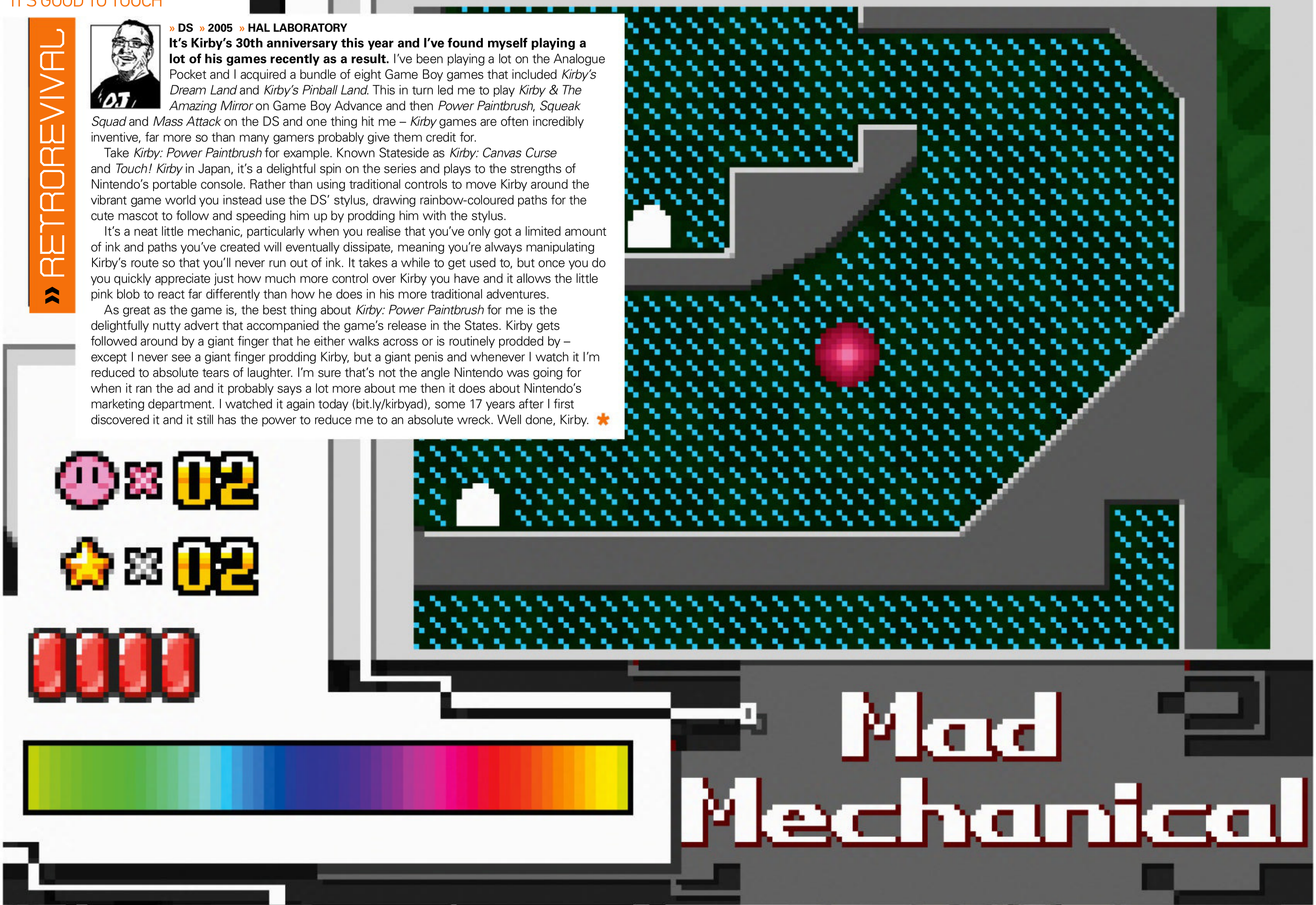
» DS » 2005 » HAL LABORATORY

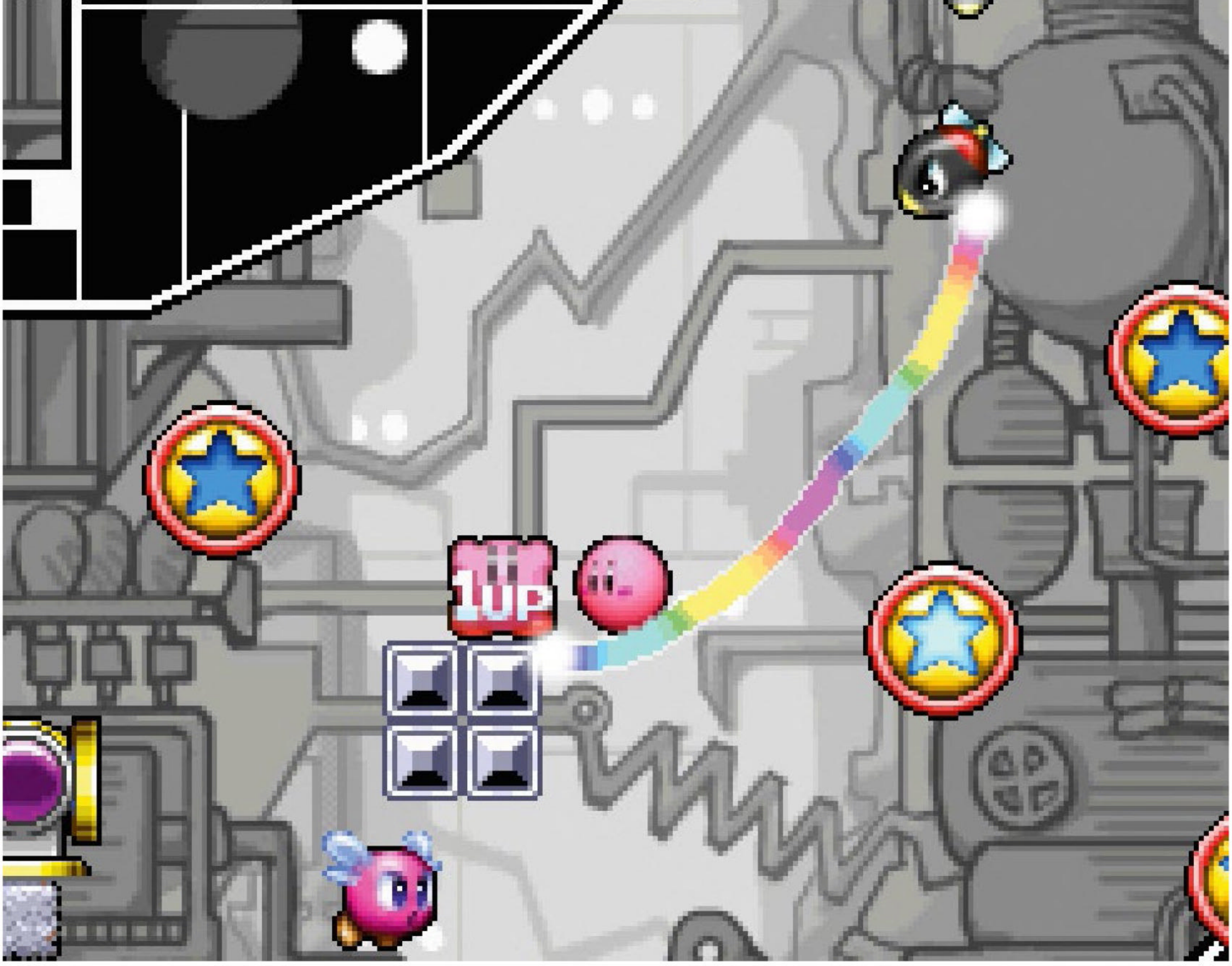
It's Kirby's 30th anniversary this year and I've found myself playing a lot of his games recently as a result. I've been playing a lot on the Analogue Pocket and I acquired a bundle of eight Game Boy games that included *Kirby's Dream Land* and *Kirby's Pinball Land*. This in turn led me to play *Kirby & The Amazing Mirror* on Game Boy Advance and then *Power Paintbrush*, *Squeak Squad* and *Mass Attack* on the DS and one thing hit me – *Kirby* games are often incredibly inventive, far more so than many gamers probably give them credit for.

Take *Kirby: Power Paintbrush* for example. Known Stateside as *Kirby: Canvas Curse* and *Touch! Kirby* in Japan, it's a delightful spin on the series and plays to the strengths of Nintendo's portable console. Rather than using traditional controls to move Kirby around the vibrant game world you instead use the DS' stylus, drawing rainbow-coloured paths for the cute mascot to follow and speeding him up by prodding him with the stylus.

It's a neat little mechanic, particularly when you realise that you've only got a limited amount of ink and paths you've created will eventually dissipate, meaning you're always manipulating Kirby's route so that you'll never run out of ink. It takes a while to get used to, but once you do you quickly appreciate just how much more control over Kirby you have and it allows the little pink blob to react far differently than how he does in his more traditional adventures.

As great as the game is, the best thing about *Kirby: Power Paintbrush* for me is the delightfully nutty advert that accompanied the game's release in the States. Kirby gets followed around by a giant finger that he either walks across or is routinely prodded by – except I never see a giant finger prodding Kirby, but a giant penis and whenever I watch it I'm reduced to absolute tears of laughter. I'm sure that's not the angle Nintendo was going for when it ran the ad and it probably says a lot more about me then it does about Nintendo's marketing department. I watched it again today (bit.ly/kirbyad), some 17 years after I first discovered it and it still has the power to reduce me to an absolute wreck. Well done, Kirby.




1UP

>> We put Taito's miniature arcade cabinet to the test, discover an exciting new world of Pokémon, read a book on side-scrolling beat-'em-ups and play Platinum Games' new shoot-em-up, Sol Cresta

» [Egret II Mini] Most of the vertical games show shimmering on a TV but appear to be 1:1 pixel perfect on the cabinet itself.

Egret II Mini

WILL YOU EGRET MISSING OUT ON THIS?

INFORMATION

- **RELEASED:** MAY (PREORDERS OPEN NOW)
- **PRICE:** €199.99 – €439.99
- **PUBLISHER:** ININ GAMES/ STRICTLY LIMITED GAMES
- **WEBSITE:** GAMESROCKET.COM (LIMITED BLUE EDITION BUNDLE, CONTROL PAD, CONTROL PANEL, PADDLE & TRACKBALL GAME EXPANSION SET)

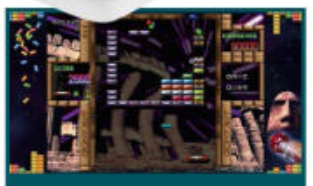
  STRICTLYLIMITEDGAMES.COM (GAME CENTER BLUE EDITION/ARCADE CABINET BLUE EDITION)

Ever since Taito announced its Egret II Mini we've been eagerly awaiting its release. While it's not the first miniature arcade unit to hit shelves (we've already had SNK's Neo Geo Mini and Sega's Astro City Mini) it is the first with an incredibly cool trick – namely the ability to rotate its monitor, just like the Egret II cabinet that it's based on. Thanks to United Games, which supplied us with a test unit, we can now find out just how much of a gimmick the rotating screen is and first impressions are that it's uniformly excellent.

Changing the screen couldn't be easier. Pushing the screen in releases it, then you can rotate it through 90-degrees, before pushing it back in place. You can do this when the unit is switched on and the screen will automatically reorientate itself so you can start playing immediately. It clicks into place with a satisfying clunk and its clever mechanical design is arguably one of the reasons why Taito's system costs so much more than its counterparts. Thirteen of the forty games that come packaged with the unit, including *Lunar Rescue*, *Halley's Comet* and *Qix* are playable using this TATE mode, so you'll get plenty of use out of this cool feature, particularly if you enjoy shmups, which are plentiful on Taito's system.

The rest of the unit is equally well made and it's rather hulking compared to its peers. It also has a rather cool feature in its ball stick which can lock to both 4-way and 8-way movement, something the other arcade units don't offer. Another feature unique to the Egret II Mini is an SD card slot which currently allows you to play ten additional games, including *Arkanoid*, *Cameltry* and *Puchi Carat*, which are included with the Paddle & Trackball Game Expansion Set (see boxout). Otherwise the Egret II Mini features all the extras you'd expect from a system like this, including two USB ports for joysticks, an on-off switch, HDMI out, a headphone socket and a USB-C port for charging. It feels well-designed with high-quality all-plastic casing that is extremely

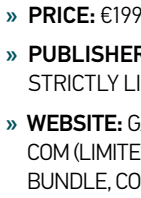
»[Egret II Mini] There are three save states for each game, although controls aren't customisable.



YOU GOTTA ROLL WITH IT

▼ HOW DOES THE TRACKBALL AND SPINNER FARE?

» If you decide to buy the Paddle & Trackball Game Expansion Set or buy Strictly Limited Games' Arcade Cabinet Blue Edition (€319.99) or its deluxe Game Center Blue Edition (€439.99) you'll receive ten additional games to play with this rather lovely controller. *Arkanoid, Arkanoid Returns, Arkanoid: Revenge Of Doh, Cameltry, Plump Pop* and *Puchi Carat* all support the paddle control, while *Birdie King, Marine Date, Strike Bowling* and *Syvalion* all support the trackball. The device is surprisingly large and extremely robust and it's been great fun playing these games using their proper controls. We did try running it on MAME, but to no avail, which is a pity as we'd imagine that would make the controller even more desirable. You won't be able to access the games without the controller being plugged in and we couldn't find any way to play the system's existing 40 games while using it, which is a shame. It's pricey, but the games and good build quality makes it worth it in our eyes. Hopefully more SD collections (*Darius*?) will be on the way.

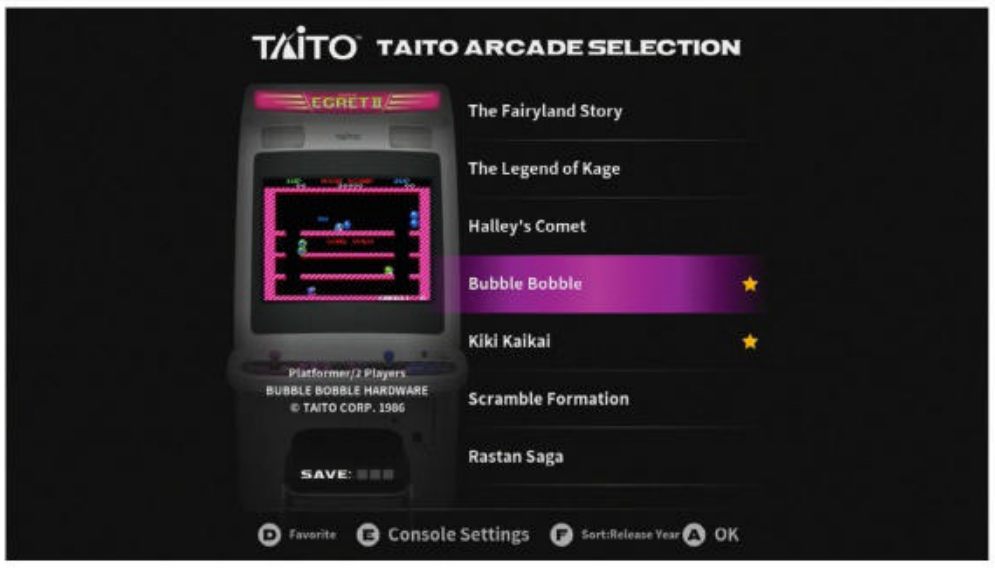


✱ PICKS OF THE MONTH

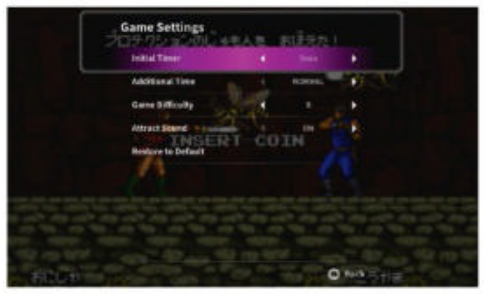
DARRAN
Powerslave Exhumed
I love this on Saturn, so I was delighted to play a fantastic new remake on my Switch and Xbox Series X.

NICK
Hover Attack 3671
I'm usually partial to Mindware's retro-styled games, and this jetpack shooter plays well and has a really cool soundtrack.

»[Egret II Mini] It's weird why the filter is default to off (above) the image is much sharper with it on (below).



»[Egret II Mini] The Egret's presentation is first class and includes three musical themes and a jingle when it turns off. English is supported for the front-end, but ROMs appear to be Japanese versions.



»[Egret II Mini] Many games like *Cadash* feature a lot of Japanese text. This menu lets you tweak numerous in-game options, but not the language, sadly.

✱ WHAT'S INCLUDED?

▼ TAITO'S SYSTEM HAS SOMETHING FOR EVERYONE

ADVENTURE CANOE • BUBBLE BOBBLE • BUBBLE MEMORIES
BUBBLE SYMPHONY • CADASH • CHACK'N POP • DAN KU GA
DARIUS GAIDEN • DON DOKO DON • ELEVATOR ACTION
ELEVATOR ACTION RETURNS • THE FAIRYLAND STORY • GUN FRONTIER
HALLEY'S COMET • HAT TRICK HERO • KAISER KNUCKLE • KIKI KAIKAI
KYUKYOKU TIGER • THE LEGEND OF KAGE • LUNAR RESCUE
LUPIN THE THIRD • METAL BLACK • MIZUBAKU ADVENTURE
THE NEW ZEALAND STORY • THE NINJA KIDS • OUTER ZONE
PIRATE PETE • PUZZLE BUBBLE 2X • QIX • RAIMAIS
RAINBOW ISLANDS EXTRA • RASTAN SAGA • RAYFORCE • RUNARK
SCRAMBLE FORMATION • SPACE INVADERS • STEEL WORKER • TATSUJIN
VIOLENCE FIGHT • VOLFIED

»If you can afford it, Strictly Limited Games' collector editions feature extras like stickers, an art book and numerous CDs.

similar to the Astro City Mini. Ultimately, it doesn't feel cheap, which is good, because certain versions of the system retail for a princely €439.99.

The system's 5-inch screen looks very good and comes with five levels of brightness (we were more than happy with the default setting of 3). Unfortunately, additional screen options are kept to a minimum. There are no scanline options of any sort and the default setting offers a rather blurry image. Thankfully there is a filter option you can turn on, which looks far better, but as the machine has to handle multiple resolutions you'll get shimmering on some games (although many do pleasingly output at a sharp 1:1 pixel perfect resolution). When connected to a TV you'll have the ability to stretch the image to fill the entire screen (never recommended), you can toggle Wallpaper on and off and even rotate the image for TATE play (if your TV can accommodate it). Emulation throughout seems extremely good and we didn't notice anything unusual during play. Titles look and sound just as we remember them and we didn't notice any significant lag, regardless of whether we were playing on the TV or the system itself.

»The rotating screen is a joy to use. We absolutely love it.

Gamesrocket.com sells the unit for €199.99, the aforementioned Expansion Set for €119.99, a Control Pad for €34.99 and a Control Panel (mimicking the ball stick and six-button setup of the actual unit, but on a bigger scale) for €89.99. We were unable to test these latter two devices, but after trying several USB-based pads (including our PS4 pad and a Hori Switch stick, which didn't work) we discovered that our Astro City Mini Pad did work (although it does lack a third button, meaning you'll need to use the unit to bring up the menu options).

For all its cool bells and whistles, the main draw of a system like this is always going to be its games and the ones included do a great job of celebrating Taito's arcade output. You've big hitters like *Space Invaders*, *Bubble Bobble*, *Elevator Action* and *Rastan Saga*, as well as more esoteric selections that include *Lupin The Third*, *Steel Worker*, *The Ninja Kids* and *Dan Ku Ga*, which was a cancelled upgrade to *Kaiser Knuckle* and one of the few games on the system which uses all six buttons during play.

Shmups are particularly well represented with classics like *Darius Gaiden* and Toaplan's *Kyukyoku Tiger* and *Tatsujin* rubbing shoulders with the likes of *Gun Frontier*, *Halley's Comet*, and *Scramble Formation*.

Taito was also well-known for its cute arcade platformers, so a raft of those also feature, such as *Rainbow Islands Extra*, *The New Zealand Story*, *Don Doko Don*, *Bubble Symphony*, *Bubble Memories* and *Mizubaku Adventure* (or *Liquid Kids* as it's better known here). If we're honest the system leans a little two far on these games, but it makes sense when you consider the popularity Taito had in this area. And besides, other genres are represented thanks to side-scrolling fighters like *Runark* and *The Ninja Kids*, one-on-one brawlers like *Kaiser Knuckle* and action games like *Elevator Action Returns*, *The Legend Of Kage* and a lone sport release in the shape of *Hat Trick Hero*. There's something for everyone on Taito's machine and it's hard to see owners being disappointed with its library.

Yes it's going to be pricey for some, but as with the Capcom Home Arcade its quality shines through with many exclusive games that would cost a fortune to legally own. If your wallet is deep enough, it's unlikely to be disappointed. ✱

In a nutshell

A gorgeous, high-quality device that does a tremendous job of capturing Taito's impressive arcade legacy.

PICK OF THE MONTH

Pokémon Legends: Arceus

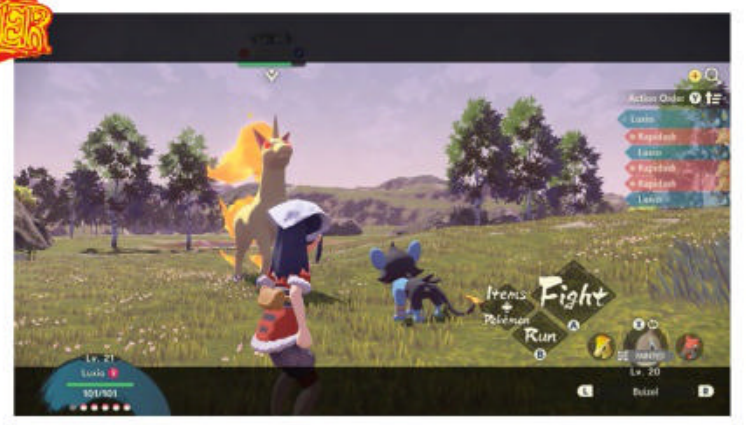
» **System:** Switch » **Buy it from:** Retail, online » **Buy it for:** £49.99

Based on the title, you might think that this is just another *Pokémon* spin-off, but don't be fooled – this is a full-scale alternative take on the critter-catching series, and it's a good one. The game starts with you falling through space and time and landing in a place called Hisui, the precursor to the modern Sinnoh region. To earn your keep in this new world, you're tasked with researching the very first Pokédex.

To do this, you'll wander around large environments trying to catch Pokémon – but this time, it's more action-oriented. You can totally avoid battles by sneaking up on them and trying to stun them with mud balls or lure them with cakes before throwing a ball. In turn, they might run away or even attack you directly. Battles are more familiar, but are no longer strictly turn-based. As moves are mastered, you can choose strong or agile variants that affect your speed, in the hope of maybe getting an extra hit in. Wild Pokémon can gang up on you, and you'll occasionally encounter giant, angry Pokémon known as alphas that are very strong and hard to catch. Building your Pokédex is now more involved, as catching one Pokémon is no longer enough – you have to observe behaviours and document variations. The new *Monster Hunter*-style mission structure is very welcome too. Beyond the main missions from your Galaxy Team masters, you can take on additional requests from a request board and people you meet. In turn, trainer battles are fewer and gym battles eliminated. The only real complaint comes with the presentation, as the Pokémon themselves look great but we know the Switch can handle nicer environments.

The standard *Pokémon* RPGs certainly aren't bad, but they are formulaic, and *Pokémon Legends: Arceus* manages to capture the spirit of those games while offering a fresh mechanical take. It's the most exciting *Pokémon* game in years and offers plenty to enjoy for fanatics, lapsed fans and series newcomers alike.

» Score **91%**



»[Switch] The game world's scale is impressive, but it suffers from pop-in and occasional framerate drops.

»[Switch] Sneaking around in tall grass trying to hide from Pokémon you're targeting can be great fun.

Rush Rush Rally Reloaded: Special Edition

» **System:** Dreamcast » **Buy it for:** £24.99
» **Buy it from:** Retail, wavegamestudios.com

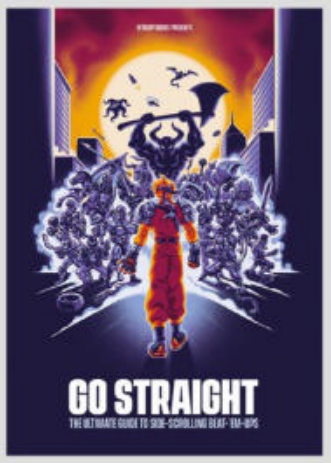
You might be familiar with Senile Team's *Rush Rush Rally Racing,* a classic top-down racer which previously appeared on the Dreamcast and Wii. This is the upgraded version of that which released in 2017, but it's back in physical form once again and now includes a special soundtrack CD. If you've missed it before, it's well-worth taking a look at now. Single players can enjoy Grand Prix racing, Time Trials and the *Micro Machines*-style Challenge mode. These are quite tricky even on normal mode, so easily frustrated solo drivers beware. However, the heart of the game is really the multiplayer mode which supports up to four players and has additional tracks to enjoy. It's really a solid package all round.

NICK THORPE

» Score **85%**

Go Straight: The Ultimate Guide To Side-Scrolling Beat-'em-ups

» **Buy it from:** bitmapbooks.co.uk
» **Buy it for:** £34.99



This 456-page tome from Bitmap Books is a gorgeous, glossy affair covering over 200 games. Dave Cook clearly loves the genre and has taken on the herculean task of covering it in its entirety. It's a noble effort that occasionally falls short due to weird knowledge gaps like not revealing that issues he had with *Super Double Dragon* were fixed for its Japanese release, or that the Amstrad and Spectrum versions of *Target: Renegade* had a cracking multiplayer mode. It's inconsistent too, with some arcade games mentioning their cut-down ports, while others omit well-known differences, like *Golden Axe*'s extra stage on Mega Drive or *Final Fight*'s hamstrung SNES port. It's still a very entertaining read (Dave is a great writer) but ultimately, it lacks fine detail.

DARRAN JONES

Sol Cresta

» **System:** Switch (tested), PS4
» **Buy it from:** Online » **Buy it for:** £35.99

We covered *Terra Cresta* in issue 230 and now we're playing a mechanically enhanced sequel, some 36 years after *Terra Cresta*'s release. Mad, eh? Anyway, aside from the fact that it has weak visuals, a useless scanline option and numerous framerate issues, *Sol Cresta* still manages to deliver that same magic that earlier games in the series had. PlatinumGames is well-known for its intricate game mechanics and *Sol Cresta*'s are rather nifty. You can control three ships – the game cleverly slows down while you're configuring them – and chain them to create unique formations to achieve devastating attacks. It takes a while to master, but once you do the acclaimed Platinum magic shines through. It's a great game that's shackled by its performance.

DARRAN JONES

» Score **75%**

THE ULTIMATE GUIDE TO ROLE-PLAYING VIDEOGAMES IS HERE

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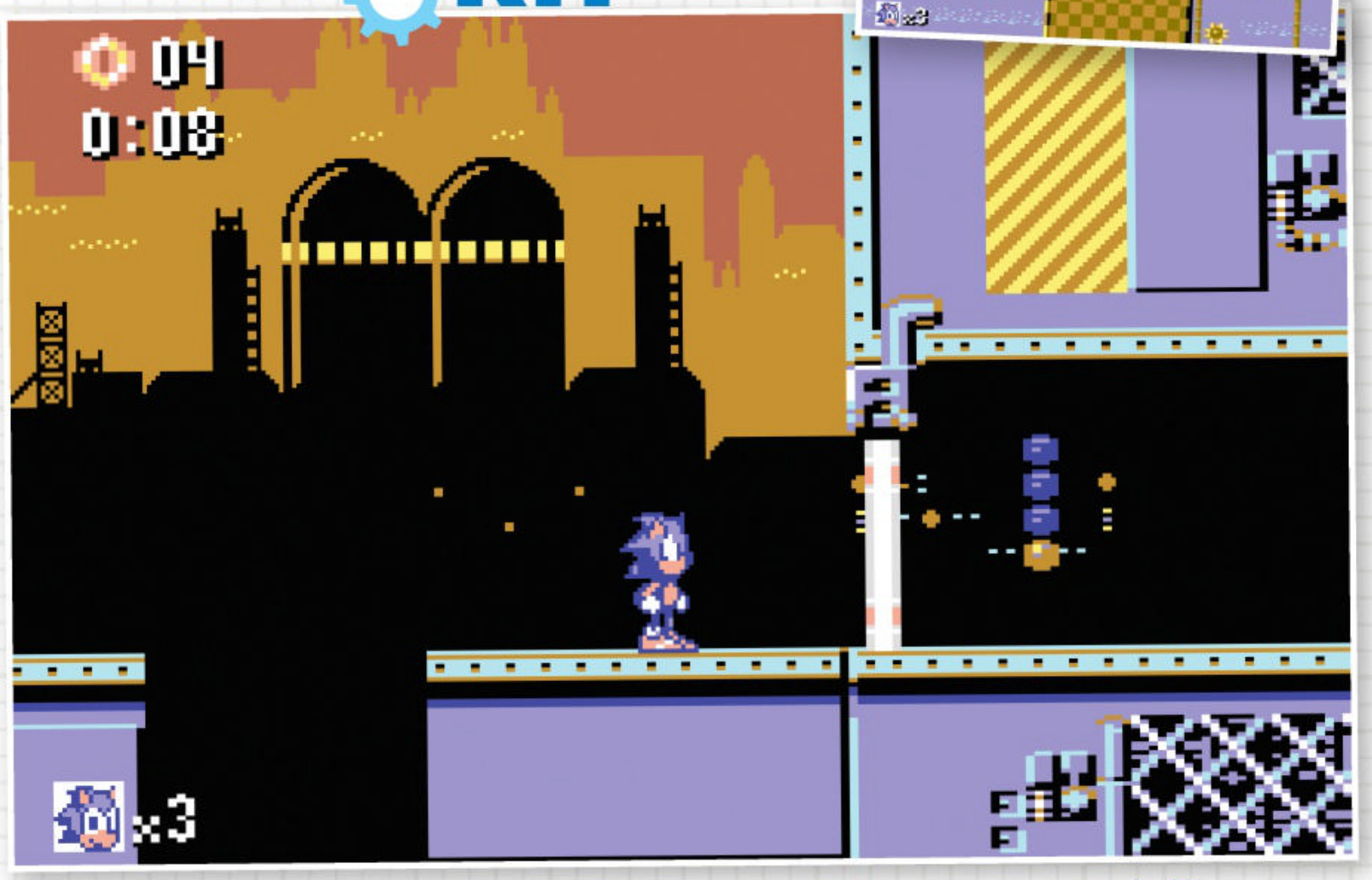
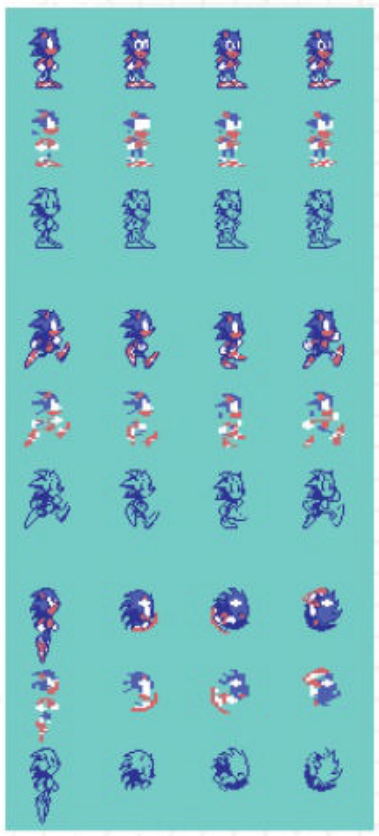
THE HOMEBREWER'S KIT

<YOUR MONTHLY GUIDE TO EVERYTHING HAPPENING IN THE HOMEBREW SCENE/>



<INTRO> IN ANOTHER PACKED HOMEBREW SECTION, WE HAVE THE INSIDE STORY OF HOW THE FAMOUS BLUE HEDGEHOG RECENTLY REACHED THE COMMODORE 64, AN INTERVIEW WITH A PROLIFIC 8-BIT PROGRAMMER, A GLIMPSE AT A FORTHCOMING PICO-8 GAME, AND REVIEWS OF RECENT RELEASES FOR THE NES, ATARI ST AND AMIGA. WITH SEVERAL CODING COMPETITIONS HAVING FINISHED RECENTLY, YOU CAN LOOK FORWARD TO COVERAGE OF THEM SOON – ONCE WE HAVE HAD TIME TO PLAY THROUGH ALL THE GAMES! </INTRO>



<!--- [C64] SONIC HIMSELF IS MADE UP OF MULTIPLE SPRITES (SEE OVERLAY BOXOUT).--->

<!--- [C64] HERE ARE OLIVER LINDAU'S SPRITES FOR THE VARIOUS ENCOUNTERS WITH DR ROBOTNIK. --->

<MAIN HEADER>

SPEEDY SECRETS

<INTRO> ANDREAS VARGA (MR SID) TALKS US THROUGH HIS ASTOUNDING CONVERSION OF SONIC THE HEDGEHOG FROM MASTER SYSTEM TO C64. VISIT BIT.LY/SONIC64 </INTRO>

<BODY> **The astonishing port of *Sonic The Hedgehog* to the C64 is currently wowing the homebrew scene, but its story begins during the season of good will.** Andreas received a Commodore 64 for Christmas 35 years ago and immediately started programming on it. It took many more years though before he decided to tackle Sega's popular hedgehog.

"When *Super Mario Bros 64* came out, that was the trigger for me to start working on *Sonic*," he tells us. "I did some research into the Master System version before that." Luckily for Andreas, his research was relatively straightforward. "A lot of the work is based on the efforts of Kroc Camen who spent what I assume must have been a long time, reverse engineering, disassembling the whole game and documenting a lot of the data," he admits. "I could sit on the shoulders of that giant and fill in the gaps. That allowed me to understand how the game works and translate it from Z80 to 6502. I write a lot of the tools that I use myself, because then I fully understand how they work."

Andreas' next task was to tackle Sonic's most recognisable feature – his blisteringly fast speed. He soon realised he'd need help to transfer Sonic's trademark trait to the C64. "*Sonic* scrolls faster than the C64 itself can scroll. It's not a secret," continues Andreas. "With the REU (RAM Expansion Unit) you can make a really fast scrolling engine. It's just that no game in the past has said, that's what I'm going to require. Because most games are made to be sold, you can't require a hardware add-on that only a certain number of people have." Andreas' next task was to work on *Sonic*'s distinctive visuals.

"There's a lot of graphics data from artist Oliver Lindau," Andreas says. "The original ROM is 256K, I fit the whole thing on two disk sides (340K), and everything is compressed. There's a lot of sprites, there's a character set for each level, and there's a lot of map data for the level layouts. I chose to use overlay sprites to get the detail and clarity from the original." After using one REU bank for each level (the level data decompresses into 65K) the next task was to tackle *Sonic*'s recognisable tunes. Luckily, Andreas knew just the person to make the C64 renditions sing.

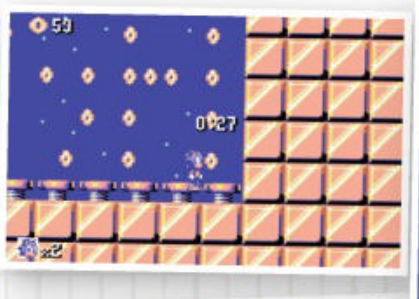
CODING SONIC

ENTITLED

<The complexity of the *Sonic* title screen means mixing sprites, raster bars (requiring precise timing to create horizontal stripes of colour) and the bitmap graphic./>

OVERLAY

<Sonic is made up of multiple sprites, with multicolour sprites underneath providing the colours and high-resolution sprites (in a single colour) on top giving definition and outline./>



044 "Mikkel Haastrup was very busy with the music,
045 he did a really good job," says Andreas. "The SID chip
046 is much more versatile than the PSG in the Master
047 System. A lot of people have childhood memories of
048 those games and especially the music." Mikkel is just as
049 much of a perfectionist as Andreas and the results speak
050 for themselves. "Mikkel spent a lot of time tweaking
051 it," confirms Andreas. "And even until a couple of days
052 before we released, he came up with, 'Hey, I made this a
053 little bit better, I fixed this and I fixed that.'"
054 So now that *Sonic The Hedgehog* has been released
055 to critical acclaim what is Andreas planning next? "I have
056 a dozen things that I am looking into, but none of those
057 is something where I am sure it's going to be possible to
058 finish," Andreas cautiously answers. "By not talking about
059 what project I'm working on and telling people when I'm
060 done, I think it's a better approach." </BODY>

<!--- ANDREAS VARGA, THE TALENTED CODER BEHIND SONIC THE HEDGEHOG ON C64. --->

<INTRO>MORE ANDREAS MAGIC</INTRO>

A BRIDGE TOO FAR

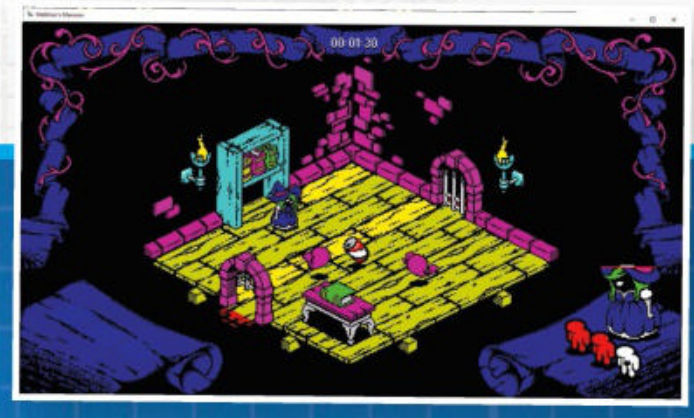
<Andreas says Act 2 of the Bridge Zone "pushes the player on in the original, and I removed that because it doesn't make a lot of sense to have automatic scrolling"./>

JUNGLE IS MASSIVE

<"The Jungle level when you fall down, it doesn't scroll down – it just kills," says Andreas. "They removed it in the Game Gear, and we removed it as it doesn't add anything."/>

NEED FOR SPEED

<Andreas kept in glitches used by speedrunners. "I try to stick to the original code – I have a huge respect for the speedrunning community, I'm trying to encourage them."/>



<!--- [PC] IF YOU'VE BEEN ENJOYING MELKHIOR'S MANSION YOU'LL SOON BE ABLE TO PLAY IT ON VARIOUS SPECTRUMS. --->

NEWSBYTES

<INTRO> YOUR SNACK-SIZED NEWS ITEMS </INTRO>

<BODY> <***Melkhior's Mansion*** **was recently released on Windows and Linux and we thoroughly enjoyed it, awarding it an impressive 85%.** If you're been patiently waiting for the Spectrum 128 and Spectrum Next versions you're in luck as they should arrive later this year. Head to bit.ly/melkhior-pc for more details. />

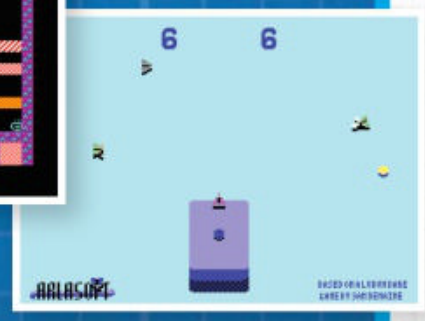
<Arlasoft has released a C64 compilation cartridge, containing no less than 24 games created over the last three years. The latest release is *Paper Planes*, and there are individual files and full source code for every game. The download is set as name your own price, but tips are welcome. Get it from arlagames.itch.io />

<Bitmap Soft announced a C64 cartridge version of *Zeta Wing*, the brilliant vertically scrolling shoot-'em-up from Sarah Jane Avory (pre-orders open 5 March), and *The Sword Of Ianna* from Retroworks for Spectrum +3. The excellent *Rogue64* (for the C64) from Badger Punch Games is selling fast, with the physical cartridge edition featuring some cool extras. There's more info at bitmapsoft.co.uk />

<Phoenix Ware's new Premium Label is working on a Game Boy conversion of the excellent C64 puzzle game *Luma*, and a retail version of *The First Project* from TedTous (originally Kickstarter funded). Phoenixware.co.uk has more info. />

<Father and son team Sloanysoft have followed up their debut game *Forward To The Past* with another ZX Spectrum platformer. *Mega Manic Mulholland* sees Pete Mulholland in his Sinclair C5 trying to escape his nightmare, collecting coffee cups to help him wake up. You can play it at sloanysoft.itch.io /> </BODY>

<!--- [C64] PAPER PLANES IS THE MOST RECENT GAME IN THE ARLASOFT COLLECTION CARTRIDGE. --->



<!--- [ZX SPECTRUM] LEVEL 3 OF MEGA MANIC MULHOLLAND ADDS THESE MOVING PURPLE PLATFORMS TO RIDE ON. --->

CHAMPION CODER

MIKA 'MISFIT' KERÄNEN

<INTRO> HAILING FROM FINLAND, MISFIT HAS CODED ACROSS MULTIPLE 8-BIT FORMATS AND EVEN THE WII </INTRO>

<INFO FROM: FINLAND WEBSITE: RIIMUKIVI.NET FORMAT: PET, VIC-20, C64, ZX SPECTRUM RECENTLY CODED: CHEESE AND CHIVE (PET), HI-SCORE (C64) />

WHEN DID YOU START MAKING HOMEBREW?
<My first computer was a Finnish VTech Laser 200 clone called Salora Fellow. My first program was a simple VIC-20 text adventure. In 2013 I bought a VIC-20 again and made *Bolder Dan*, a *Boulder Dash* clone. />

<!--- MIKA IS A TALENTED CODER AND A BIG FAN OF THE VIC-20. --->

WHY WRITE NEW GAMES FOR OLD MACHINES?
<I'm a software engineer and I got frustrated by modern platforms. Too complex, and no fun! 8-bit machines are so cute and simple. One man can master them and write all the code from scratch. />

WHAT INSPIRED THE RODMAN SERIES, AND PORTING ACROSS MULTIPLE FORMATS?
<The Future Was 8-Bit wanted a multi-screen *Pac-Man* clone. I added the bombs. *Rodman* = Rod Hull is the man. I have a weird sense of humour. I made a hardware interface for VIC-20 and realised I could port it to different machines. I tested, and it worked. Porting is a quick way to test all that nice hardware. />

IS THE VIC-20 DIFFICULT TO PROGRAM FOR?
<Yep, sometimes different memory settings are painful. But those blocky pixels are so cute. You don't need as much artistic skill to create a decent VIC-20 game if you compare it to C64. />

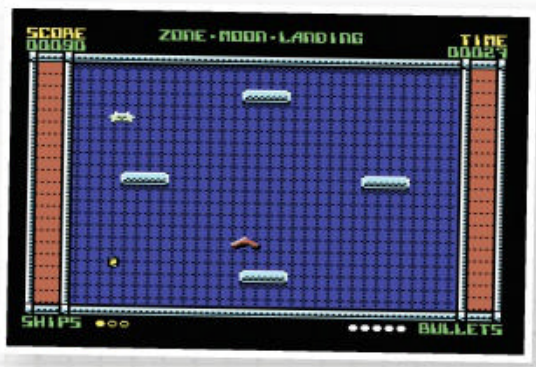
HOW IS CHEESE AND CHIVE FOR PET GOING?
<TFW8B and Tynemouth Software released a MiniPET Kit, and asked if I could make *Cheese & Onion* for PET. I realised it would be better to make a brand-new game, because I had an idea about smooth scrolling. It's almost finished. />

WHAT DEVELOPMENT SYSTEM DO YOU USE?
<I have a Mac. I draw assets with Aseprite and convert to binary format with my own converter. I use CC65 for 6502 and Z88DK for Z80. Gameplay is pure C-code and easy to transfer, but I make assembly functions if speed is needed. />

WILL YOU BE MAKING ANY MORE SHOOT-'EM-UPS GOING FORWARD?
<Finnish retro band 8-Bits High recorded a new album – I made a brand new C64 shooter called *HI-SCORE* for it, and they made the SID music. />

WHAT'S YOUR DREAM PROJECT?
<My demonic, isometric adventure game for C64 mixes Finnish fairy tales and dark themes, with SID music to be made by 8-Bits High. I hope I can finish it someday. />

<MORE ABOUT CHEESE & ONION FOR PHYSICAL COPIES: THEFUTUREWAS8BIT.COM FOR DIGITAL DOWNLOADS: MISFIT.ITCH.IO 8-BITS HIGH: 8BITSHIGH.BANDCAMP.COM />



<!--- [C64] ROCK-HARD SHOOTING ACTION IN HI-SCORE, WHERE YOUR BULLETS BOUNCE BACK OFF PLATFORMS AND CAN BLOW YOU UP. --->

<!--- [PET] WITH SMOOTH SCROLLING, ANIMATED WAVES AND EVEN AN IDLE ANIMATION, CHEESE & CHIVE IMPRESSES. --->

DATA BURST

WITCH N' WIZ

<INFO BY: MATT HUGHSON FORMAT: NES PRICE: DOWNLOAD $10 OR MORE VISIT: BIT.LY/WITCHNWIZ />

<BODY> **A prototype of this cute puzzle game entered the NESDev Compo 2020-21, before the full game went on sale as a limited-edition cartridge that has quickly sold out.** Luckily, you can still purchase the ROM for use in emulation, or by using a flash cart on real hardware.

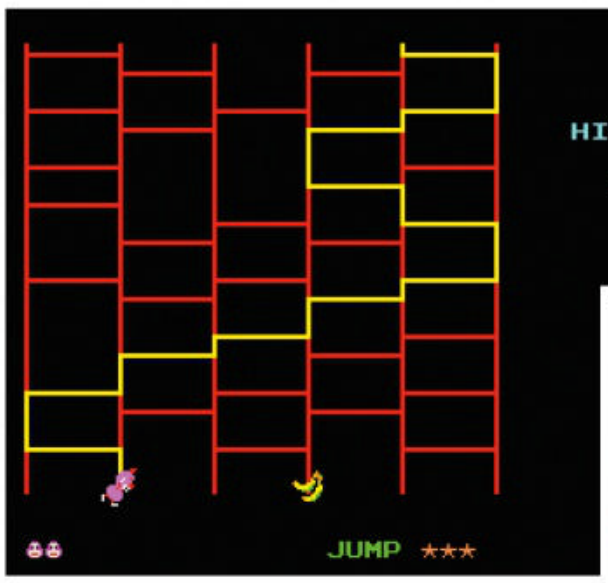
Witch N' Wiz features a young witch who is out to rescue her friend, who was kidnapped by the Dark Sorceress five years ago. After the clever 'playable' intro, each chapter is split into multiple single-screen levels. The witch must walk into all the level's monsters from the side to clear them and complete the screen. She can climb vines and push blocks, with every object subject to gravity. Like the recent C64 game *Millie & Molly*, you can rewind your movements by pressing B – to undo your mistakes and try another strategy – or reset the level completely from the pause menu.

Settings in the menu include handy accessibility options, as well as the ability to toggle Tui's excellent music on or off. Later levels spice up the challenge by adding new mechanics, with the 'wraparound' puzzles of Chapter 2 being particularly memorable. Levels can require a certain amount of head scratching, but never feel too difficult to solve. The game saves your progress and keeps note of your best clearance time for each level (although the timer is optional). With lovely background graphics and cute sprites, *Witch N' Wiz* looks exceptionally good. The end result is a high-quality game with plenty of long-term challenge. </BODY>

SCORE: 87%

<!--- [NES] THE PUZZLE DESIGN IS VERY GOOD, PARTICULARLY IN CHAPTER 2 WHERE WRAPAROUND PUZZLES COME INTO PLAY.

THE HOMEBREWER'S KIT



<!--- [AMIGA] WE FAILED TO COLLECT THE BONUS BANANA HERE. OOPS. --->

<!--- [AMIGA] ROLL UP FOR PERFECT ARCADE ACTION IN THIS AMIGA AMIDAR CONVERSION. --->

AMIDAR500

<INFO BY: JOTD FORMAT: AMIGA 500, 1MB MEMORY PRICE: FREE WEBSITE: BIT.LY/AMIDAR500 />

<BODY> **Did you know the name Amidar comes from Amidakuji, a type of Japanese lottery?** Jotd's brilliant conversion of the Konami arcade game took part in the recent AmiGameJam, which we will be looking at in more detail soon. It's a very accurate conversion with your gorilla collecting all the dots in order to colour in boxes, while avoiding various enemies. You also play as a paint roller, which becomes quite tricky as you can only paint along lines from existing completed boxes. Colliding with an enemy kills you, but a limited number of jumps (which throw all enemies into the air) lets you dodge them at close range. Even the bonus stage has been included, where you press fire on the correct stick so your pig moves downwards and collects the waiting fruit. *Amidar500* is a perfect recreation of the hit game, right down to the sound FX and the arcade's 'four corners' trick. Don't miss it. </BODY>

SCORE: 83%

<!--- [ATARI ST] ANDY NOBLE RELEASED THIS CONVERSION OF OLD TOWERS FOR FREE. --->

<!--- [ATARI ST] BY LEVEL 10 YOU HAVE TWO CHARACTERS TO CONTROL. --->

OLD TOWERS

<INFO BY: ANDY NOBLE FORMAT: ATARI ST PRICE: FREE WEBSITE: BIT.LY/OLDTOWERS_ST />

<BODY> **This is the latest conversion of Retro Souls' Mega Drive game, which plays a lot like a mobile release.** You must escape each level of the tower by collecting all the coins, which activates the teleporter. You keep moving in the same direction until you hit a wall/obstacle and you die when hitting an enemy or arrow. Later levels switch control between two characters to increase the complexity, with mirrors, one-way blocks and more. *Old Towers* has decent graphics and a rendition of *Popcorn* drives the game well, but it really lacks a password system so you can easily gain access to later levels once you have cleared them. </BODY>

SCORE: 78%

PROCESSING

<INTRO> THIS MONTH, WE'VE BEEN LUCKY ENOUGH TO QUIZ JOHAN PEITZ ABOUT M8ROID, HIS INCOMING PICO-8 GAME INSPIRED BY METROID </INTRO>

<BODY> **Johan programmed the brilliant PicoCAD graphics software for the fantasy console – but will Nintendo shut down his new game?** "I'm very passion driven when it comes to my retro-inspired work and most of the reward is achieved during the development. If it is shut down, I still had a good time making it." Johan started work on *M8roid* in August 2021 but admits his development time can be "pretty fractured". *M8roid* currently lacks sound but it certainly recreates the look and feel of early *Metroid* games, with the mini-map that fills in as you explore, statues that reward you with upgrades including the Morph Ball and numerous impressive bosses. "I've realised that I'm not as good at designing levels as I hoped I was,"explains Johan, "which is a shame since the game is 99% level design. But I try to make it up with interesting enemies and keep the game simple and enjoyable." Johan is also working on *Tiny Tanks*, a recreation of the classic artillery game *Scorched Earth* with landscape deformation already in place, as well as a PICO-8 roguelike. Follow him on Twitter (@johanpeitz) for more news. </BODY>

<!--- [PICO-8] THIS M8ROID BOSS POPS UP FROM THE GROUND, SHOOTING BULLETS FROM ITS EYEBALL. --->

RETROBATES MULL OVER THE SCENE'S MOST INTRIGUING I

AMIGA MEMORIES

We recall our first moments with Commodore's 16-bit computer

DARRAN JONES

NICK THORPE

TIM EMPEY

After going all out with this month's A500 Mini coverage it only felt right to look back at the machine that inspired it. Darran, Tim and Nick get together and get all dewy-eyed as they recall the first time they saw Commodore's popular home computer.

DARRAN
So what's your first memory of the Amiga? Mine is seeing *Batman* running around Nicholas Leonard's house and being amazed at the intro with all the speech. It blew my tiny mind.

NICK
I remember playing *Sleepwalker* at the local play barn, on what I believe was an Amiga 600.

TIM
Similarly *Batman* was also one of the first Amiga games I played, but one of many as our Amiga 500 came with a load of games in some sort of deal. *Buggy Boy* was one of them, but so was *ThunderCats* and that was awful. *Batman* was great though aside from the chemical-mixing bit.

DARRAN
Wow, so you actually had an Amiga then? That's impressive Tim, I didn't know anyone personally (Nick was a friend of a friend) as they seemed hideously expensive at the time.

NICK
Same, I didn't actually know any Amiga owners.

DARRAN
So Tim, lord of the Amiga. What games did you enjoy playing?

TIM
Yep, my crushingly middle-class background enabled us to get one. I'm sure my brother did most of the parent badgering though. So many great games: I remember my brother and I sitting up all night when we first got *Defender Of The Crown* and trying to figure out how to play it.

DARRAN
My memory of *Defender Of The Crown* is seeing it on the Amiga that was in the shop window at Densham's, our local computer shop. Did you get much of a chance to play on one, Nick?

NICK
Not much, no. I played a couple of other games at the play barn like *Dragon Tiles* and *Robocod*, but I ended up playing most of the Amiga games that everyone loves on other platforms.

DARRAN
I remember going with my mum to her friend's house to play on their computer, which is where I played *Speedball 2* and *Xenon 2*, but generally they were rare on our estate. My friends who stayed in higher education all ended up owning them but that would have been 1990 or 1991. What did you like about the Amiga then, Tim? Did it feel like a big upgrade over the C64?

TIM
Reminiscing now it feels like the Amiga was a big part of my life, but it was only for a few years really. But there were some brilliant games on it that I loved. *Xenon 2*, *Super Cars II*, *Stunt Car Racer*, I could go on, but I have to italicise all these game names. Then we got the 1MB upgrade and an external disk drive – which was essential for loading *Dune II*.

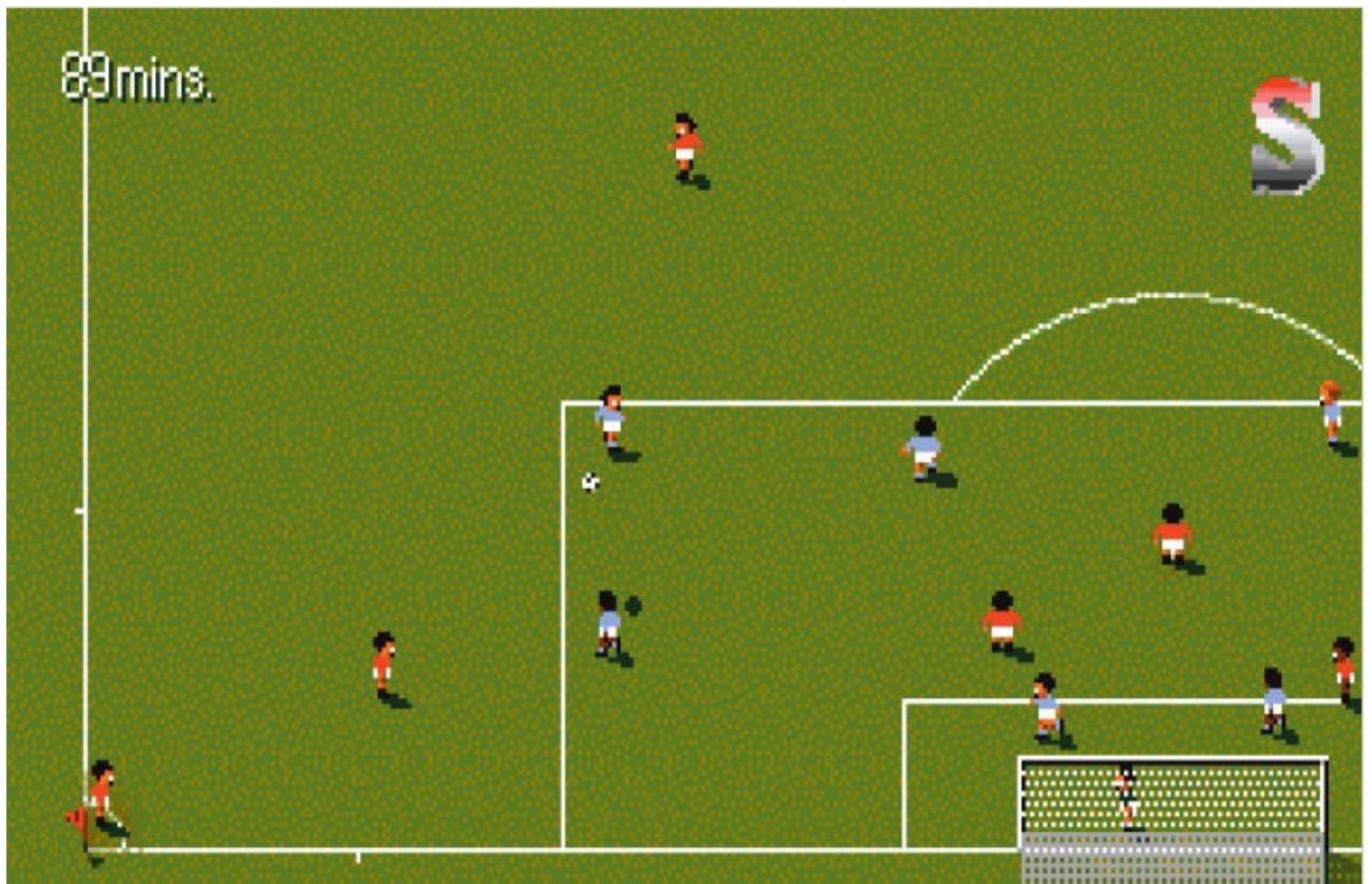
DARRAN
Oh my, Tim. You've just reminded me that when I worked at Gateway I'd go back to Jon Little's house because his mum's boyfriend worked nights and we'd sneak in to play his Amiga and we were always playing *Stunt Car Racer*. We woke him up once when we were swearing while playing *Double Dragon* and he went absolutely crazy and booted us out the house so Jon broke his mouse in retaliation.

NICK
I think after a while, I realised that my dad probably should have got an Amiga instead of a Mega Drive. He loved games by The Bitmap Brothers, as well as things like *Flashback*, *Theme Park*, *Powermonger*, *Sensible Soccer* and *Cannon Fodder*.

DARRAN
I played a lot of those games on the Mega Drive or SNES. I think by this time my friends Mark and Marcus had Amigas and I definitely remember enjoying games like *Theme Park* and *Cannon Fodder* more when they were on a mouse. Were you a fan of the big Amiga devs like Sensible Software, Tim?

TIM
I didn't really take note of who developed the games back then to be honest. It didn't seem to matter much to me, it was just all about the games. *Populous*! *Populous 2*! *Pinball Dreams*! *Project X*! *Lotus Esprit Turbo Challenge*! The demo disks! The confidently correct opinion that it was better than the Atari ST!

> "I think after a while, I realised that my dad probably should have got an Amiga instead of a Mega Drive"
> **NICK THORPE**



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» [Amiga] *Speedball 2: Brutal Deluxe* is another firm favourite with the team, even if they didn't all experience it on Commodore's machine.

NICK
I did own an Atari ST for a bit, and yeah, I'll admit you're not wrong there.

DARRAN
I knew one person with an Atari ST and we used to go around his house to play *Black Lamp*. I ended up buying my own Amiga in late-1992 or early 1993. I've told the story in the mag many times before. I never should have purchased it.

NICK
Why shouldn't you have done it?

DARRAN
Because once I got over my fix of playing *Eye Of The Beholder 2*, *Alien Breed*, *Indiana Jones And The Fate Of Atlantis* and *Sensible World Of Soccer*, I quickly realised that all the kind of games I did like (arcade conversions and shmups) just weren't as good on the Amiga. I think I ended up keeping it for less than a year, before going back to the familiarity of consoles.

TIM
But *Rick Dangerous*! *Syndicate*! *Turrican*! *Shadow Of The Beast*! *Flood*! *Mega-Lo-Mania*! I should shut up, I'm just making more work for myself.

DARRAN
I had *Rick Dangerous* on the Amstrad, never played *Flood*, though. Any good?

TIM
I loved *Flood*. It had solid sound effects and the gameplay was great. I remember the last game I played on the Amiga, it was *Space Crusade* with two friends back in 1994, it blew us away. Then I bought a Mega Drive and it has been consoles ever since. The A500 Mini is looking very enticing after delving through all these memories.

NICK
Yeah, that's why I'm enjoying playing around with it. I never owned an Amiga, so I'm getting to experience a whole bunch of games that I've never tried before. Better yet, I'm getting to do it without taking a punt on whether or not a particular floppy disk is dead.

» [Amiga] Darran always wanted to play *Stunt Car Racer* on his Amstrad CPC, but he knew it would probably be rubbish on it.

» [Amiga] Tim and Darran both have fond memories of *Batman*. Levels like this were a big step up over the 8-bit versions.

AMIGA FOREVER

Readers recall their time with Commodore's 16-bit computer

Derek Morrison
Using an Amiga for the first time in September 2021, a CD32 with a Terrible Fire 330. I wish I would have learned about the Amiga sooner and got one sooner than I did. I love it.

Chris Jowett
Buying a RAM expansion for my A500 and doubling it to a whole 1MB! Oh how I thought I'd arrived!

Centric Collective
Walking past a shop window and spotting *Dragon's Lair* on a demo loop, being stunned by the graphics and revisiting the shop countless times to watch it again and again (before owning an Amiga).

Britt Roberts
I think it'll always be the wave of emotion I felt as I completed *The Secret Of Monkey Island*, knowing I'd never have that feeling again. It was the first time I'd ever been so emotionally engaged with a story and its characters.

Norwich Amiga Group
My favourite memory is a recent and ongoing one – setting up and running one of the biggest and most active user groups around. [That's very cool – Ed]

Luke Raynor
As a kid playing *Cannon Fodder* on my dad's Amiga 500 with him. The heartbreak of having to watch Jools or Jops get gunned down after keeping them alive for so long. Lol.

Simon Dueck
Going to a mate's house after school and playing *Speedball 2*, *James Pond 2: Robocod* and *Another World*. I only had a Game Boy at the time so I was blown away by the graphics.

Daniel Major
Witnessing the opening sequence to *Shadow Of The Beast II*, hearing that music, seeing that title screen. I've never had a feeling from a game like it since. Incredible.

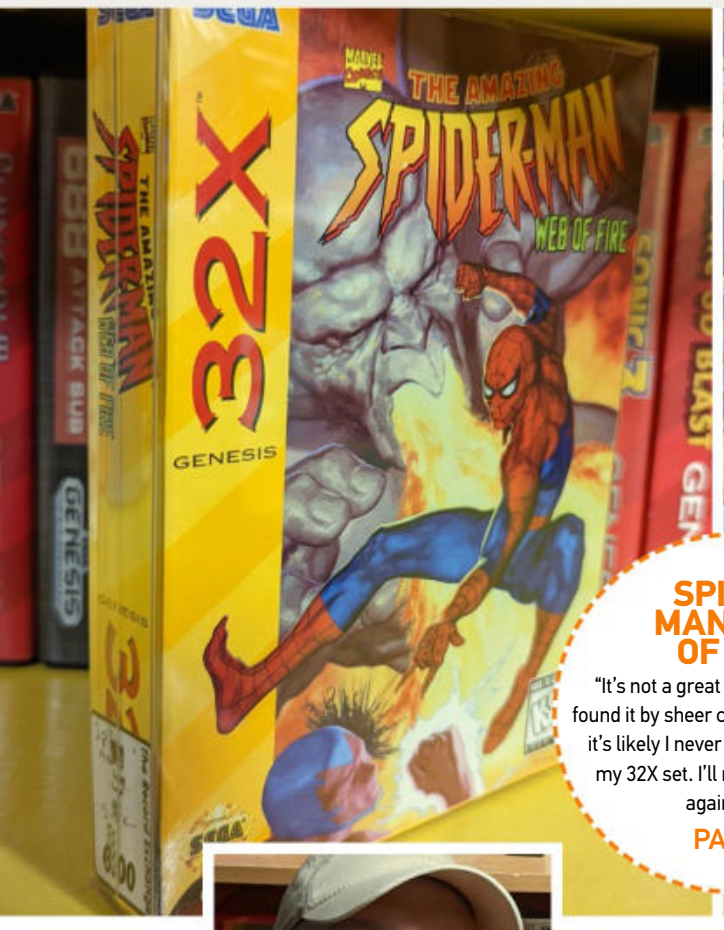
Khertz
Going around to a friend's house after school, him putting the disk in the drive and the gold shimmering letters of *Defender Of The Crown* appearing on the screen. It seemed like such a massive leap from the ZX Spectrum I owned.

Erik Eriksson
Sitting with my friend, two Amiga 500s and two huge TVs next to each other. Me on Deluxe Paint II most of the time, him playing games.

Rothenberger Paul
That sweet moment of buying my Amiga from Silca Systems in Sidcup and booting up *Batman*. Boy did I love my Amiga.

COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**



SPIDER-MAN: WEB OF FIRE

"It's not a great game but if I hadn't found it by sheer chance when I did then it's likely I never would have finished my 32X set. I'll never get that price again either."

PAID: $6

DREAMCAST COMPLETE SET

"This was the first console I bought with my own money, and I worked in a game store through its entire, all too brief lifespan. It took 20 years to get everything, and that was a satisfying journey."

PAID: CAN'T RECALL

BIO

NAME:
Matt Paprocki

LOCATION:
Toledo, Ohio

FAVOURITE GAME:
Contra III: The Alien Wars

FAVOURITE SYSTEM:
Neo Geo

COLLECTION WORTH:
Never calculated

TWITTER:
@Matt_Paprocki

SAMURAI SHODOWN V SPECIAL

"The only Neo Geo game I bought new, the final AES game released, and it's my favourite fighting game series."

PAID: $250

RIGHT PLACE, RIGHT TIME

Our latest collector has always tended to think ahead

A good amount of Matt Paprocki's impressive collection is a result of him being in the right place at the right time. "In 1996, after I started working my first job at a video store, they were clearing out their stock of NES games for a few dollars each," he says. "My paycheques were used to buy out their inventory." Yet that is not all.

Over the years, Matt has developed a knack for snapping up games and consoles that others don't seem to want at the time. "Although I started playing games on the Atari 7800, the NES was my first obsession, as with a lot of Eighties kids. That led into the SNES and, given when I started working and had my own money, those were the consoles the stores were clearing out. I'd buy games in bulk as no one else wanted them," he continues.

As we cast our eyes across his envy-inducing games rooms (that's right, rooms!), we're overwhelmed. There are neatly arranged shelves of games for more 'modern' systems such as the PS4, PSP and Xbox 360 (that's future-proofing right there) as well as boxes of Neo Geo games wrestling for space with SNES delights and stacks of Genesis and Sega CD games. Matt also has a wall of retro gaming magazines to keep him busy in between playing.

"My Dreamcast and 32X collections are complete," he reveals. "I'm also nearing a Game Gear set but I don't usually focus on one thing. My complete sets were more accidents that happened as I acquired more and more games, realising I was close enough to finish them off." The result is a collection spanning the Eighties and Nineties although there's a greater emphasis on the latter decade.

"The true retro room is designed to look like the ultimate Nineties bedroom with everything a kid would have wanted back then – a 12-foot wall stuffed with games, a dozen consoles all hooked up, a store kiosk and even a LaserDisc player. It's a true step back in time," Matt gushes. He also prizes his collection of less common items. "I'll buy anything when I find it. When I walk into a game store, I tend to be drawn to the oddball stuff like CD-i, 3DO and so on – the consoles that generally don't show up in the wild."

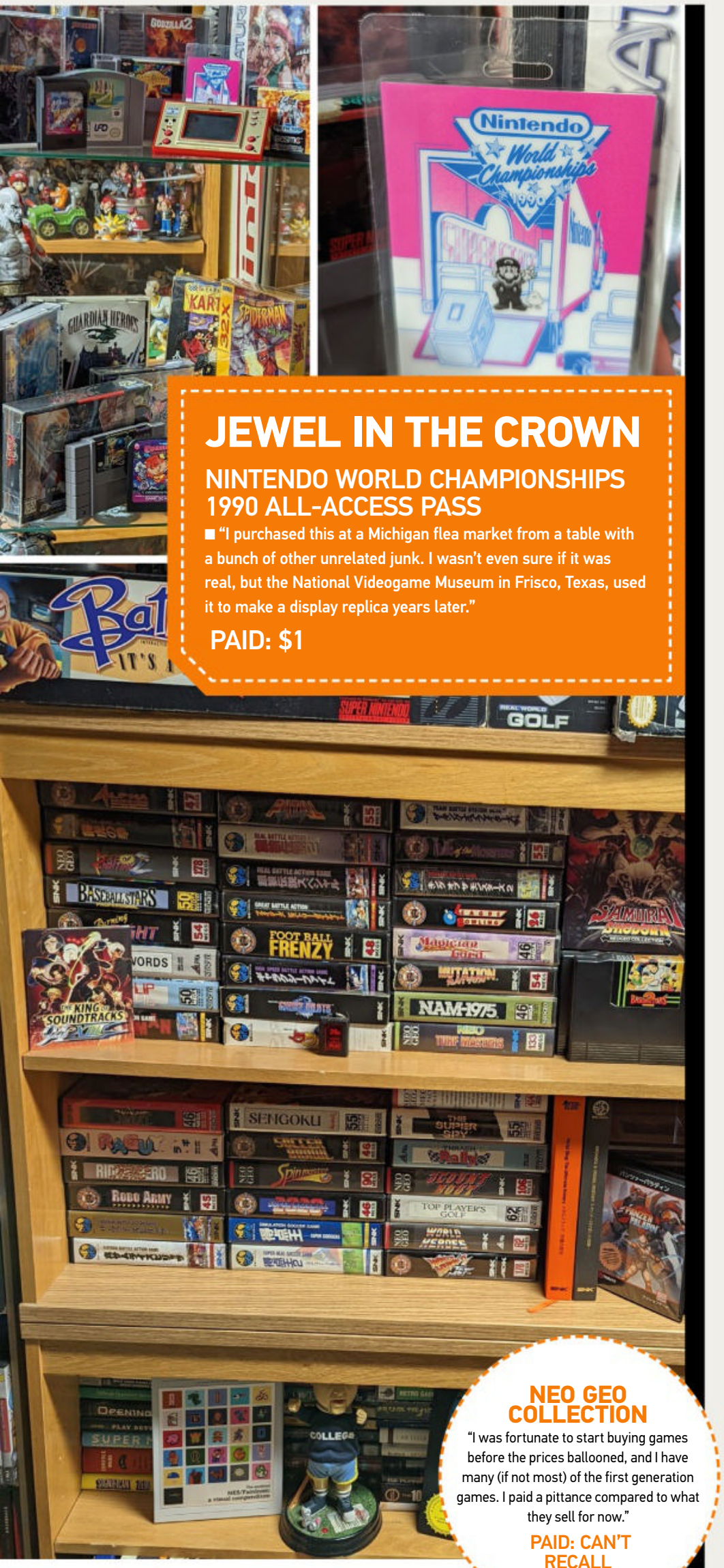
Dotted in between the machines is a wealth of memorabilia. "As game collecting started to blow up in terms of market value and I had most of the games I genuinely wanted, I started to grab little trinkets, promo items and action figures. It's easy room decoration," he says. "Plus, as a kid, I would have loved having Mario action figures. It's nice to see those things being produced consistently now."

He's certainly seen lots of changes over the 25 years he's been collecting, notably in terms of the prices items can sell for. For those wanting to start collecting, he has wise advice, "Do the legwork. Get off the internet. Stop paying premium prices. Start going to flea markets, garage sales and thrift stores. You'll strike out on games 99/100 times, but when you finally find a stack, it's the best feeling."

Matt also believes the pricing bubble should pop for Nineties games but, in the meantime, he reckons collectors should look for movies, books, electronics, toys and other things aside from games ("That way, you're not discouraged by how few games you find"). He also advises spotting potential in the later generations. "If the PS2/Xbox era is retro, then it's generally a great time, a handful of costly games aside," he says. "If it's the Xbox 360/PS3, there will never be a better time."

Got an impressive collection of your own? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com



JEWEL IN THE CROWN

NINTENDO WORLD CHAMPIONSHIPS 1990 ALL-ACCESS PASS

■ "I purchased this at a Michigan flea market from a table with a bunch of other unrelated junk. I wasn't even sure if it was real, but the National Videogame Museum in Frisco, Texas, used it to make a display replica years later."

PAID: $1

NEO GEO COLLECTION

"I was fortunate to start buying games before the prices ballooned, and I have many (if not most) of the first generation games. I paid a pittance compared to what they sell for now."

PAID: CAN'T RECALL

BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

THE A500 MINI

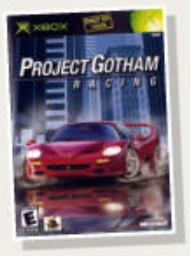
Even before this tiny version of the Amiga 500 was released, someone bought it on eBay for **£250** but we suspect that price will be a one-off. Boxed Commodore originals sell for about **£150** but the prices are usually dependent on what's bundled with it. Untested or faulty computers sell for around **£80.** Watch out for yellowing, failed power supplies and video output problems.

CJ THE ELEPHANT GAMES

You can pick up the Commodore 64 and Spectrum versions of *CJ's Elephant Antics* for about **£5,** with the Amiga port worth around **£2** these days. But *CJ Elephant Fugitive* on the Game Gear will set you back as much as **£256** and that's without the box!

SUPER SCOPE

If you want to pick up the gun with its six bundled games then you can pay as little as **£23** boxed. It obviously depends on the condition because some fetch twice that.



PROJECT GOTHAM RACING

Well, your heart won't be racing when you discover this easily found game can be snapped up for **£1.** Xbox fans should definitely include it in their collection.

SIR LANCELOT

Not to be confused with Level 9's *Lancelot* that will cost you **£22,** this Melbourne House platformer lists for about **£5.**

GOD OF WAR

Want a sealed copy of this PS2 hit? Then you could be paying as little as **£99** or as much as **£565!** Used copies sell for **£10.**

KIRBY: POWER PAINTBRUSH

This charming game is slowly rising in price. The European edition regularly hits **£30,** while the US edition (search for *Canvas Curse*) reaches **£45.** The Japanese version rarely hits **£15.**

SABRE WULF

This varies on Amstrad depending on what you go for. The big box edition hits **£15,** while the Ricochet version tops out at **£12.**

HOW MUCH?!

KIZUNA ENCOUNTER: SUPER TAG BATTLE

This Japanese version of SNK's fighting game recently sold for **£1,799.99** even though the cartridge had some fading. Imagine what the European version would sell for given that there are only five known copies in existence – a true rarity.

Prices correct at time of print

MY RETRO LIFE

PERSONAL STORIES ABOUT OUR **SHARED PASSION**

TOO MUCH STUFF

Darran's planning a restructure for 2022

Collecting is a funny old thing. You can get so focused on what you're after and the thrill of the hunt that it's all too easy to forget what you actually have. As it turns out, I've got way too much stuff, more videogames than I could ever possibly play and it's probably time that I did something about it.

I was pondering this over the Christmas break and while I'm not usually a fan of making New Year resolutions, I decided that 2022 was the perfect time to reevaluate both my collection and what I plan to do with it going forward. As regular readers of the magazine will know (or anyone that visits RLLMUK or my personal Twitter account (@retrogamer_daz) I'm rather all over the place when it comes to collecting. I'll get an idea in my head and start aggressively going after stuff, only to stop a few months later when something new inevitably catches my eye.

I'm still doing it now, as playing around with the Analogue Pocket has renewed my interest in the Game Boy, Game Boy Advance and Game Gear. I've completed some games, but I've also bought a fair few loose cartridges to play as the Pocket's screen looks so good. So look at me. Already I'm beginning to contradict what I was saying, I clearly can't help myself.

I'm fortunate enough to be in a situation where I have a rather nice gaming shed that not only houses my games but now doubles up as a place to craft the mag. It's a decent-sized room that came about because Melanie was exasperated by the sheer amount of space my games were taking up in the house. I've had it for around seven years and it's proven to be a very sensible investment.

There's only so much space in it however and I'm sure that's something we all face as collectors, regardless of where we keep our games or what we choose to collect. Money is another factor of course. Retro games don't seem to be really dropping in price at the moment and with all the expected real-world price hikes that are just around the corner buying old games feels more like a luxury than ever, so it's time to pull in the purse strings and look at other ways to fund my habit. (Because let's face it, it is a habit.)

There's a great line in *Fight Club* where Tyler Durden (a ridiculously sinewy Brad Pitt) proclaims, "The things you own end up owning you." It's something that's always struck me but I've felt it a lot more keenly over the last two years. Since COVID-19 I've become a lot more cautious about what I do. I work permanently from home, I very rarely visit friends and family and it takes a lot of persuading to make me go anywhere, particularly if it involves interacting with other people. I still go for walks every morning and I've visited shops every now and then, but generally I stay home.

By constantly being at home it's hard not to be reminded of the sheer amount of stuff I have because I see it every day. It's impossible to ignore and it's become impossible to escape (and it does sometimes feel like I need to escape from it all). Granted, these first-world problems won't seem serious to some, but they are to me and they became more obvious once I downloaded a cool app called Gameye.

This nifty device tracks all your games quite thoroughly. Granted, it's largely US-based, but as most of my games are NTSC this isn't really a problem for me. It took most of a Sunday to list all my games and that's when I had my first big shock – I had ended up listing 1,132 physical games across 16 consoles and 11 handhelds. Oh, and that doesn't include my sealed Limited Run collection of Vita games which is residing in my loft alongside my Xbox 360 games that aren't currently backwards compatible.

Combing over my games that Sunday not only highlighted what I have, but also the games I didn't really need. Many I picked up with the best of intentions, but many were also bought for no other reason than they're games that websites/magazines say should be in every collection. This in itself is rather absurd as everyone likes different things and it's a point my cousin Martin has made to me numerous times in the past – I eventually heeded his wisdom a few years back and it did help whenever I started looking at new systems to collect for.

So my plans this year are twofold: get rid of stuff I'm probably never going to play and use the money from those sales to fund future retro games and those high-end items that I can't justify spending actual money on. By doing this I'm hoping to create space on my shelves, replace the few games I genuinely regret selling and grab those I've always desired (while keeping Mel happy). Granted some of those games aren't exactly cheap (I think *Pokémon Puzzle League* is roughly £150) but my mind is wired in such a way that even though I'm receiving money for the games I sell, it's not actual money to me – it's just me exchanging one or several games for something I actually want, retro alchemy as it were.

So there you have it. That's my big retro gaming plan for 2022, what is yours going to be?

LEARNING TO LET GO

MY TIPS FOR THINNING YOUR EXISTING COLLECTION

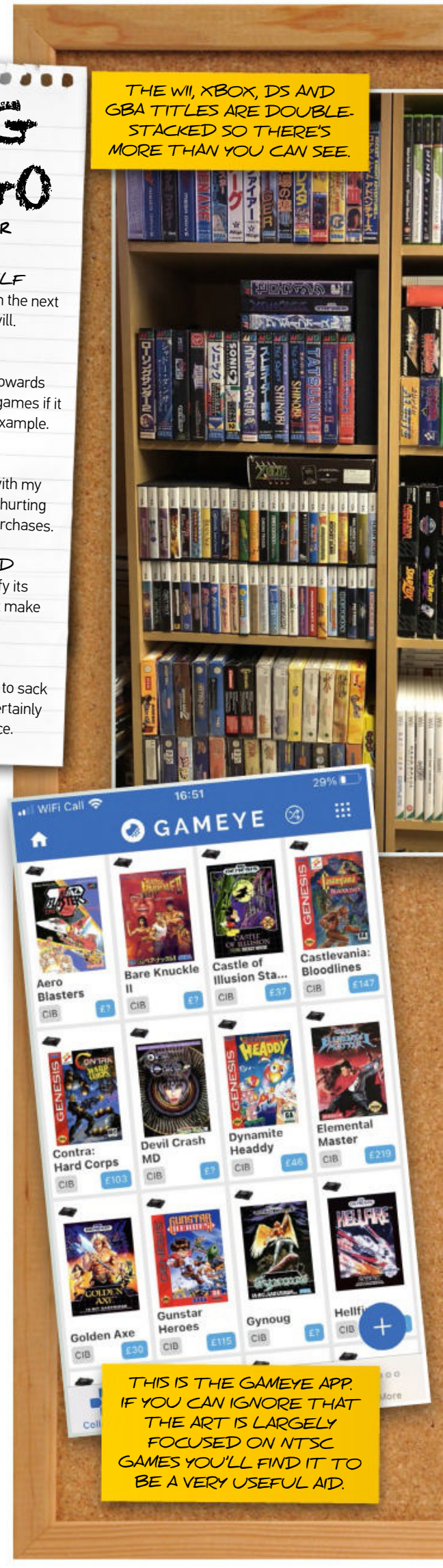
BE HONEST WITH YOURSELF
I'll pick up a game and ask myself if I'll play it in the next few months. If I won't I probably never will.

SET GOALS
It's a lot easier to let stuff go if you can put it towards something you really covet. I'll happily trade 20 games if it generates enough cash for *Slap Fight MD* for example.

CHECK IT'S OK
Melanie is usually happy to ignore what I do with my game collection providing we're not financially hurting elsewhere. I always keep her in the loop with purchases.

NO JUSTIFICATION NEEDED
It's your collection and you don't have to justify its existence to anyone. Collect how you want, just make sure it never gets out of hand.

MAKE BUNDLES
Sell your high-end stuff online but don't be afraid to sack off lower-end stuff to a collector. You'll almost certainly lose money, but will gain back precious space.


THE WII, XBOX, DS AND GBA TITLES ARE DOUBLE-STACKED SO THERE'S MORE THAN YOU CAN SEE.
GAMEYE
Aero Blasters
Bare Knuckle II
Castle of Illusion Sta...
Castlevania: Bloodlines
Contra: Hard Corps
Devil Crash MD
Dynamite Headdy
Elemental Master
Golden Axe
Gunstar Heroes
Gynoug
THIS IS THE GAMEYE APP. IF YOU CAN IGNORE THAT THE ART IS LARGELY FOCUSED ON NTSC GAMES YOU'LL FIND IT TO BE A VERY USEFUL AID.

I SOLD THIS YEARS AGO TO FUND MY FIRST CAMERA LENS. IT'S THE FIRST HIGH-TICKET ITEM I'VE BOUGHT USING MY NEW SYSTEM.
NORMALLY THIS WOULD BE USED TO HOUSE NAIL POLISH, BUT IT WORKS AS A NICE DISPLAY CASE FOR MY LATEST OBSESSION.
COLLECTORS WON'T OFFER A LOT FOR SELECTIONS LIKE THIS BUT IT CLEARS SPACE, WHICH IS A PREMIUM AT THE MOMENT FOR ME.
THE EVERCADE GAMES ARE MOVING INSIDE TO FREE UP SPACE. (THEY'RE MEL'S PROBLEM THEN.)
ONE OF MY GOALS FOR 2022 IS TO COMPLETE MY N64 MAGAZINE COLLECTION – 20 MORE ISSUES TO GO.
[MEGA DRIVE] IT'S TAKEN ME MANY YEARS AND COST A LOT OF GAMES, BUT I NOW OWN SLAP FIGHT MD.

GETTING FOCUSED

What readers plan to do in 2022

Durothil Skyreaver
I'm planning on playing more of the games I've collected in the last year now that I have my Analogue Pocket.

Eric Fry
2022 is going to be the year of the Master System for me.

pizza & video games
I'm going to be spending my retro gaming budget on gas and electricity this year.

Rev Phil Richardson
It's definitely time to purge the unwanted chaff, I appreciate what I have when I have less of it, not more!

Ben Wilson
Tempted to get back into Mega Drive collecting – a system I've now sold twice and regretted both times.

Retro Gaming Geek
TBH, with the current state of things, I'm going to have to see what sort of disposal income I'm left with to even consider collecting in 2022.

zx_spectrum_30
I have several collections around 80% done, would love to finish a couple. There just always seems to be an elusive title or ten.

Jason
I really need to cut down. I do have quite the collection already. I feel I should go through them and sell some. Especially when I see prices of old games at the moment.

Doc Tiger
Slowing down on collecting any retro games this year. The prices continue to rise and it has killed all desire I have to keep collecting old and rare.

Jartravian
I'm only planning on keeping up with new Evercade carts and rounding out my Game Boy collection a little.

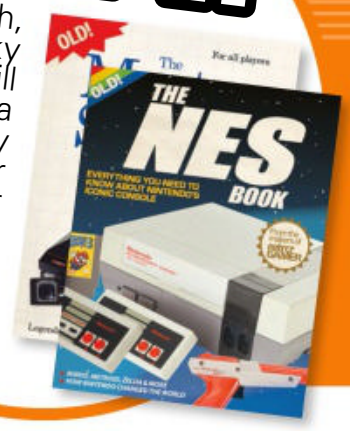
Zoot Sax
Have fallen back in love with my ZX Spectrum, so picking up games at a decent price.

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

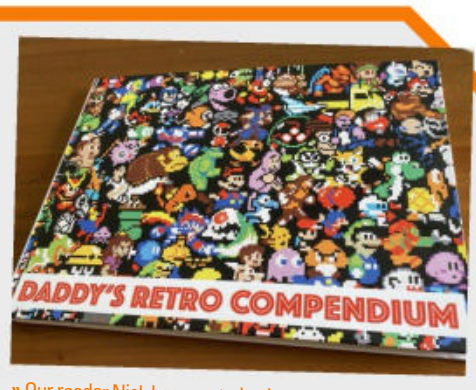
Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books



STAR LETTER

BOOK IT!

Dear **Retro Gamer** team,
As someone who has read your magazine for years I always felt that you have meaningful jobs. You are taking your love of gaming and turning that into a creative endeavour. That time spent gaming is turned into something tangible – through the articles, magazines and books you publish.



» Our reader Nick has created quite a special book for himself here, we're very impressed.

One of the biggest downers for me was when I finished a game – asking myself, it was nice but what now? So inspired by your pages, I started to make my own retro gaming compendium. It is not for sale or something commercial, rather, somewhere I can take my experiences and capture them permanently – turning that time into some meaningful. Ultimately also, leaving something behind for my kids when I am not around. Now onto version 2.0!
Nick

That's very cool! You've clearly gone to a lot of effort to make something nice there, and while plenty of people will blog or post about their gaming on social media, we've never seen something quite so permanent. We naturally know how much time it takes to play games, write about them and then design those pages, so to do all of that with no expectation of a wider audience is pretty impressive. One thing we spotted was that you recorded your play times, which is a nice way to emphasise the personal nature of the book. It looks like you've been playing a lot of really good games, too – we particularly liked seeing *Golf Story* on the contents page.

» *Alex Kidd In Miracle World DX* gets a loving treatment, even if Nick enjoyed other games more.

PORT INSPECTOR

Dear **Retro Gamer**,
I've been a **RG** reader for a long time – and at the grand old age of 45, a gamer even longer. I love the varied features within the magazine, along with the fascinating interviews, but by far my favourite element has been, and always will be, Conversion Capers. Growing up during the very peak of the playground format wars, it's interesting to look back at the games I loved without the brown/colour-clash/green-tinted glasses most of us wore back then. I was fortunate to own a good number of systems over the years, but I still succumbed to elitism at times. Sure, we used to see screenshots of other formats on the inlays of the cassettes we bought, and if you were a *C&VG* reader you had the ability to delve a little deeper, but how many of us read reviews of games on those other systems we didn't own unless it was with lust? I used to do just that with the Sega Master System which seemed otherworldly at the time! I'd play the odd ZX Spectrum or Amstrad CPC game at a mate's house, but generally our exposure was either limited, or filled with the attitude of bravado, scorn and denial.

As an adult with disposable income I can buy the systems I didn't have back then and appreciate games on their own merits, but through Conversion Capers I get an overview of the game, a focus on a developer or format, and a hit of nostalgia from poring over the screenshots as we did back then. Collectors surely appreciate that section, too, especially if they

» If you ever fancy a game of *Yie Ar Kung-Fu*, Steve's got you covered. Next step: arcade PCB.

» [ZX Spectrum] You'll certainly never look at this version of the game and think it's on the Commodore 64.

enjoy owning a particular release on multiple formats. Please keep up the comparisons!
Steve Green

PS: one such multiformat release in my collection attached as evidence!

We're glad you enjoy Conversion Capers, Steve. Before cross platform engines like Unreal Engine and Unity came along, games reflected the technological peculiarities of the platforms they ran on. We're glad that life is easier for developers now, but doing Conversion Capers reminds us that machines used to feel distinct from one another, and we do miss that.

SEND MORE SEGA

Hi **Retro Gamer**,
I'm not ashamed to admit I'm a huge Sega fanboy and loved the Saturn and Dreamcast, but it pains me to see so many of their old IPs just gathering dust. Can you imagine new versions of those old classics!? I'd be happy with re-releases or collections on modern systems (like the Dreamcast collection that came out on Xbox 360/PS3) but it seems they are just ignoring them! Surely in today's market with retro gaming getting more popular and more expensive, there would be enough interest? Anyway, rant over, I'm off to write some strongly worded letters to Sega now!

And remember, it's thinking…
Paul Adams

While there's no denying that Sega is sitting on plenty of classic games, we'd say that it's been doing a pretty good job of getting

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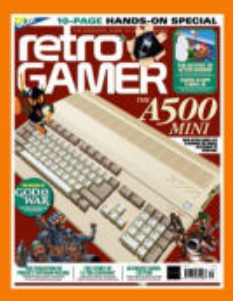

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Email: retrogamer@futurenet.com

» [Switch] Sega's getting its old franchises back into the spotlight, even if it's not developing them itself.

» [Arcade] Incredibly muscular men wearing skimpy clothing and grappling with one another? We're in.

Nick's a big wrestling fan, so we certainly wouldn't count it out – it'd be a good Ultimate Guide at some point in the future.

RETAIL RECALL

Dear **Retro Gamer**,

Apologies if this has been an article already but I'm wondering if anyone remembers a mail-order company called Special Reserve? I have fond memories in the early Nineties of saving up pocket money to purchase big box Amiga games, if I could persuade dad to call up and pay with his credit card! I'm sure I used to get a monthly magazine with reviews in the back with all kinds of games you wouldn't see in Woolworths or WHSmith?

Nic Totten

» We're pretty sure that everyone who ever read a Nineties mag remembers Special Reserve's advertising.

Hi Nic, we do remember Special Reserve quite fondly as plenty of Nick's games came from the stores in Sawbridgeworth and Chelmsford. We have covered the company relatively recently – Lewis Packwood's feature appeared in issue 215. That magazine was called *NRG*, as it goes.

DISCUSSED THIS MONTH

What we're watching

What does Andy do when he's not playing *Bannerlord*? Well, he watches films like *Uncharted, Nightmare Alley* and – bizarrely – *12 Rounds*, which is essentially *Die Hard With A Vengeance* but with John Cena. Nick's been watching the *Shenmue* anime on Crunchyroll, and has recently imported a DVD box set of the Canadian sitcom *Letterkenny*, while Darran has been snapping up 4K Blu-Ray versions of *GoodFellas, Backdraft, Last Action Hero* and more. Meanwhile, Tim has been watching *Peacemaker* and *South Park*, he says they're hilarious.

SOMETHING TO GRAPPLE WITH

Are you doing *WWF Superstars*, arcade 1989?

Barry Kelleher

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

Are you getting an A500 Mini? What are you playing first?

Chris Jowett
Had mine preordered since last August. Going to ride the wheels off *Stunt Car Racer*!

Wayne Peter
Ordered it on the day it was announced and can't wait for it to arrive! First job will be getting *SWOS* on there!

Jason
I have one ordered. I may already have a working Amiga but the ease of hooking this up made it a good idea. First game I'm going for is *Alien Breed 3D*. Love that game and never finished it. The time is now.

Dr Ovaltine Von Focke-Wulf
Nope, not in the slightest bit interested whilst I still have the real thing. Weirdly enough I was just giving it a check over last night and it's still working fine.

Fritz T Montecristo
I won't be getting one because the first two games I wanted to play (*Shadow Of The Beast* and *Cannon Fodder*) aren't included. But I hope other people enjoy theirs. Yes, I know you can side-load your own games. No, I can't be bothered figuring that out.

Anthony Bull
The Chaos Engine followed by *The Lost Patrol* – the Amiga versions were light years ahead of the rest, I can't wait to finally experience them in all their glory

Erik from Sweden
Pinball Dreams no question. Here's hoping they've got that "tok tok tok brrrrp" sound the disk drive used to make playing when inserting a USB drive.

Richard Langford
I ordered one. I usually emulate stuff but can't be bothered with all the faff of Amiga emulation!

Matthew Smith
Getting my A500+ *Cartoon Classics* pack on Christmas Day 1991. It was my first home computer, I was utterly thrilled and delighted with it, and it would change my life in a multitude of splendid ways.

retro GAMER

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What? I don't
means. I've ne
money before.

Sakura Wars: So Long, My Love

SO LONG, MY SANITY

» PS2 » 2005 » SEGA/RED ENTERTAINMENT

Every type of media tends to have some sort of awful trope, one that you need to learn to tolerate if you're to truly enjoy it. You know the sort of thing – horror movie protagonists who never clock that going into the basement is a bad idea. Romantic interests doing really scummy or creepy things, like in *Love Actually* or *Twilight*. Pro-wrestling referees who will look at anything except the blatant cheating happening in the ring. Well, anime features an enormous amount of nonsense and as a result, people online often refer to their 'anime bullshit tolerance'.

Sakura Wars: So Long, My Love was the first game of its series to be localised into English, and like its predecessors it's a hybrid dating sim and tactical RPG. You play the role of Shinjiro Taiga, a young Japanese man sent to work for the New York Combat Revue – a theatre troupe that also happens to be a military unit, which fights demons with big robots. It's a supposedly clandestine operation, despite the fact that it raises entire streets to launch its airship from a giant crossbow. Oh, and did I mention that all of this takes place in the 1920s? Don't take any of this as spoilers, all of this is opening chapter stuff.

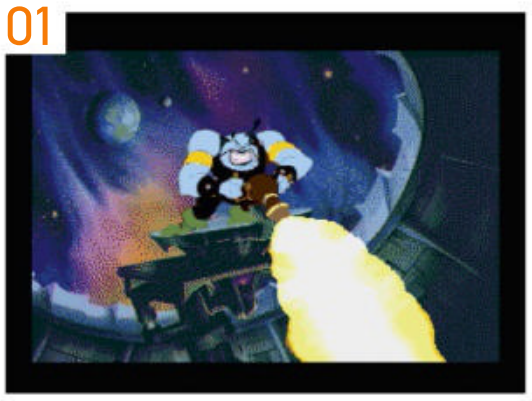
I streamed this game last year, and although the battles are well constructed and include varied objectives, it's the dialogue that takes precedence – and that's what kept people coming back. We all thought it couldn't possibly top itself, until we saw how the plot to gentrify Harlem was thwarted. Later, we discovered what the NYPD was willing to declare war on – and it wasn't the demons ravaging the city. We were positively steaming about how samurai cowgirl Gemini Sunrise was treated by her master, as well as the well-intentioned but frustratingly written disabled character Diana. We haven't even covered the delightful Cherry Cocker, the gun-toting infant Rosita Aries or the romantic escapades of the lovely Peppermint. It was sometimes cringe inducing, often hilarious and always deeply weird, and it kept us entertained for months – but then, we've all got incredible anime bullshit tolerance.

ENDGAME

SPACE ACE

» The battle between good and evil is as old as time. Borf and Ace (or Dexter as he's also known) are the latest two characters to be involved in such a titanic duel and, as is typical for an Eighties action game, they're battling for the love of a beautiful girl – in this case, the red-headed Kimberly. Borf has kidnapped her and has no intention of letting her go, but Ace is determined to win his love back. But which of them will prevail for Kimberly's hand? There's only one way to find out – fight!

01

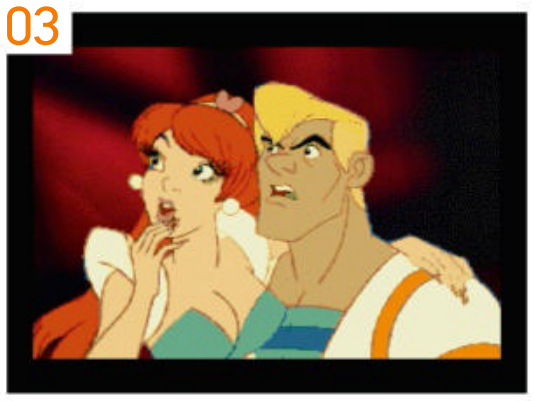


» "I have the high ground," screams Borf as he pummels Ace with an oversized cannon, which really doesn't mean that he's overcompensating for something. Ace ignores Borf's evil taunts and looks for a way to turn the tables.

02

» "The tables have turned," crows Ace as he bounces Borf's laser back at him, causing the blue buffoon to drop his beloved prize. Ace catches the falling Kimberly and they both look upwards towards their defeated foe.

03



» Kimberly and Ace look towards where they last saw the blue bandit but there's too much smoke in the air. "Be ready for anything," warns Ace as the smoke begins to dissipate and a huge form slowly appears.

04

» Borf is back and begins laughing maniacally as he aims his cannon at the loved-up pair with the intention of destroying them for good. But something isn't quite right and the blue berk transforms into a tiny baby who Ace dutifully catches as the blue bambino plummets from his overhead perch.

05

» Kimberly is made-up with Baby Borf and vows to look after him forever. Ace is far from impressed, but figures his girlfriend is at least safe from the blue brute now. How wrong he is. Baby Borf is already planning his next move and begins wondering how much damage a baby's bottle will do in his tiny blue hands.

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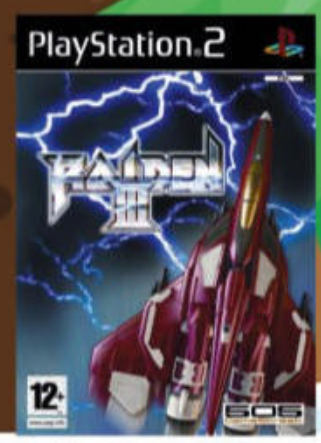

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